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ABSTRACT

This paper examines problems with description of the canonical passive construction, noting how new terminology facilitates consideration of a particular approach to frequency asymmetry. It compares the canonical passive construction in Arabic and English as examples of genetically unrelated languages, referring to other languages where appropriate. By generalizing across several versions of the derivational system of Universal Grammar, it traces a possible theoretical description of this construction. In light of the most recent incarnation of the P&P model, the paper reconsiders the entire terminological apparatus, accounting for all natural instances of the construction in terms of the syntactic behavior of the internal arguments that the main lexical verb has the potential to combine with. The approach to frequency asymmetry is identified with functional convergence and divergence between Arabic and English in the canonical passive construction from all possible angles, noting that, despite this frequency asymmetry, the two sorts of internalized knowledge of the canonical passive construction are symmetrically balanced in the minds of native speakers of English and Arabic. The paper discusses the problem of learnabilty within the natural order of the canonical passive construction in the process of L1 acquisition, suggesting a logical order of teachability in respect to the same construction in the process of L2 acquisition. (Contains 114 references.) (SM)

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The canonical passive construction: theory and practice

Ghiath El-Marzouk

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The canonical passive construction: theory and practice

Ghiath El-Marzouk

0 Introduction

It is often argued that the canonical passive construction (i.e. its verbal representation) in any natural language instantiating this construction is essentially conditioned by pragmatic exigencies from the viewpoint of language use. These pragmatic exigencies include the speaker's specific intention to forgo mention of the real Agent (i.e. the doer of the activity portrayed by the main lexical verb) for whatever reason. The logical consequence is, therefore, to generally define the passive form of the main lexical verb as a constituent which entails the syntactic deletion, and subsequently the anonymousness, of the real Agent in the unmarked situation, a definition that has been familiar in the history of linguistic thinking since the Middle Ages (see, for example, Al-Ghalaayiini, 1982; Owens, 1988; Owens, 1990). Even if the real Agent is syntactically inserted in the marked situation, on the other hand, its identity may also remain incognito for reasons which are to do with the lexical nature of the main lexical verb itself. Along with the distinction between unmarkedness and markedness in this sense, a corresponding distinction has thus been made between what is known as the 'agentless' or 'short' passive and the 'agentive' or 'long' passive.

But the pragmatic connotation of the canonical passive construction, be it agentless/short or agentive/long, also entails certain changes in the structural representation of the canonical active version. These changes comprise the subjectivization of the object-NP (or any syntactic category standing proxy for it), the attachment of passive morphology to the main lexical verb, the necessary deletion or insertion of the Agent-PP, and the like. Structural changes such as these are assumed to emerge from the 'mental' interaction between a given set of general principles which have been designated within the framework of Universal Grammar (UG) (see, for example, Chomsky, 1981; Jaeggli, 1986; Chomsky, 1988a; Baker *et al.*, 1989; Haegeman, 1993; Haegeman, 1994). The fundamental objective is to underline the typological convergence between even genetically unrelated languages in the application of these general principles, and to explain the apparent typological divergence in terms of setting different values of the same parameters involved such as the parameter that is responsible for word order (e.g. VSO in Arabic, SVO in English, etc.) and the parameter associated with the passive morpheme or complex of morphemes (see, for example, Fassi Fehri, 1987; Fassi Fehri, 1988; Ouhalla, 1991). This is because the apparent typological divergence between natural languages, which can only be observed at the two levels of morphology and phonology, is said to be "illusory and epiphenomenal, the result of interaction of fixed principles under slightly varying conditions" (Chomsky, 1994, p.4).

However, a 'non-apparent' typological divergence between natural languages, a matter that does not seem to have received sufficient attention in the literature, is also discernible (given the availability of the relevant evidence) but only at a third intervening level, viz. the functional or extrinsic dimension of the canonical passive construction. In particular, this intervening level addresses the manner in which natural instances of the construction in question function cross-linguistically. Thus, as it is true that there exist certain canonical passives in language X which do in fact function as corresponding canonical passives in language Y, it is equally true that there exist further instances of the same construction in either language which do not exhibit this functional convergence between the two. Furthermore, even in the case of functional convergence (where there also exist structurally distinct types of the canonical passive construction), not every type of this construction in language X functions as a corresponding type in language Y (or vice versa). In order to offer a reasonable account of the functional or extrinsic dimension, an investigation into the potential cross-linguistic differences in the frequency of the same construction appears to be necessary in this connection.

Apart from the functional or extrinsic dimension, the structural representation of the canonical passive construction and its pragmatic connotation have in fact resulted in the treatment of this construction within at least two 'antagonistic' enterprises, namely, the generativist and the non-generativist. While the generativist enterprise (i.e. Universal Grammar (UG)) attempts to explain the construction as a syntactic phenomenon arising from the workings of specified principles of the mind, the non-generativist enterprise (including Relational and Functional Grammar) tends to view the same construction as a pragmatic phenomenon, whose sole function is societal, and thus to examine it to the detriment of the principles that underlie its structural representation. What one would expect from this undesirable conflict is nothing but the coinage of a rather confusing terminology to describe several different types of the canonical passive construction. Within this terminology we find what are collectively known as the 'personal passive' and the 'impersonal passive', the latter being a less common type than the former. Generally speaking, the personal passive is assumed to involve the subjectivization of a non-subject category that has a semantic content as in (1) below, whereas the impersonal passive is said to subjectivize the semantically contentless nominal expletive (e.g. *huwa* 'he' in Arabic and *it* in English) for the strict reference to an unspecified human Agent as in (2) below.

(1) a. kutiba al-kita:bu fi: al-k̲ari:fi.
(Gloss: was written (3sm) the-book (Nom) in the-autumn (Obl))
b. The book was written in the autumn.

(2) a. ?̲urifa anna al-kita:ba thawriyyun.
(Gloss: was known (he) that the-book (Acc) revolutionary (Nom))
b. It was known that the book was revolutionary.

We also find what is called the 'pseudo-passive', which seems by far the most misleading term in the literature, since it still reflects the structural and lexical properties that are characteristic of the canonical passive construction in general but with 'accidental' output representations in the language-particular sense. This term has been coined to identify certain instantiations of the construction in question where peripheral NPs that are prepositionally marked are incorporated, viz. PPs other than the Agent-PP. In languages such as Arabic, for instance, no input representations would affect the base-position of the non-Agent-PP under canonical passivization, thereby giving rise to the expletive interpretation of the subjectivized pronominal *huwa* 'he', and therefore to a further instantiation of the 'impersonal passive' as in (3a) below. In languages such as English, on the other hand, the peripheral NP in the non-Agent-PP (i.e. the object of P in this case) would establish a 'new' grammatical relationship with the main lexical verb under the same condition of canonical passivization. As a result, the base-position of the non-Agent-PP is affected via the subjectivization of the peripheral NP it contains, a property that is typical of the 'personal passive' as in (3b) below.

(3) a. ni:ma fi: al-bayti.
(Gloss: was slept (he) in the-house (Obl))
(Lit.: It was slept in the house.)
b. The house was slept in.

How, then, can the term 'pseudo-passivization' be perceived if in either exemplification the main lexical verb exhibits its canonical passive morphology and presupposes the 'existence' of an active version? Looking at the English counterpart in (3b), the subjectivization of a non-subject category that has a semantic content does actually apply, whilst at the same time the strict reference to an unspecified human Agent is maintained, hence the subjectivization of the semantically contentless nominal expletive in the Arabic counterpart in (3a). This means that neither the 'personal passive' nor the 'impersonal passive' nor any other term such as the 'pseudo-passive' is adequately coined to account for these factual observations about the canonical passive construction among others. As the combining form *pseudo-* itself usually indicates, the term in fact can only be understood as an appropriate description of those instances which incorporate passive-like elements at a superficial level, but have nothing to do with passivization, be it canonical or non-canonical, simply because such instances do not presuppose the 'existence' of active versions as in (4) below.

(4) a. fulija al-maliku.
(Gloss: was paralysed (3sm) the-king (Nom))
b. The King was paralysed.

So it can be seen that the problem with the description of the canonical passive construction is a fundamentally terminological one. The purpose of the current study is, therefore, two-fold: primarily, to attempt to solve this terminological problem on a theoretical level, thereby identifying the solution in the universal sense (the concern of part 1); and secondarily, to show how the new terminology facilitates consideration of a particular approach to frequency asymmetry, so that some useful implications of this approach can be discerned on a practical level (the concern of part 2).

On the theoretical level, the study will offer a detailed comparative examination of the canonical passive construction in Arabic (its written form in particular) and English as two samples of genetically unrelated languages, though reference will be made to some other languages where appropriate. By generalizing across several versions of the derivational system of UG, viz. the TGG model and two incarnations of the P&P model, the possible theoretical description (or descriptions) of this construction will be traced within the conceptual limitations of the terms referred to above. Then, in the light of the most recent incarnation of the P&P model, the discussion will seek to reconsider the whole terminological apparatus in this respect, and to account for all natural instances of the construction in question in terms of the syntactic behaviour of the internal arguments that the main lexical verb has the potential to combine with. If at least one internal argument moves to subject position under canonical passivization, then the resultant construction will be termed the 'dynamic passive'. If, however, all the internal arguments remain in their base-positions under the same condition of canonical passivization, then the nominal expletive is inserted in subject position and the resultant construction will be termed the 'static passive'. This polarity of 'dynamicness' and 'staticness' (a polarity which indicates that there exist just these two types both intralinguistically and cross-linguistically) will therefore be established for a reasonable account of the functional dimension of the canonical passive construction within a particular approach to the potential frequency differences between the two languages involved.

On the practical level, on the other hand, the approach to frequency asymmetry will be identified with functional convergence and divergence between Arabic and English in the canonical passive construction from all possible angles, an identification which entails the implementation of a certain set of frequency paradigms and sub-paradigms, given the dynamic-static representation of this construction. Furthermore, the study will also explain that, in spite of this frequency asymmetry, the two sorts of internalized knowledge of the canonical passive construction (viz. linguistic knowledge and pragmatic knowledge) are in principle symmetrically balanced in the minds of both the native speaker of Arabic and the native speaker of English, a balance which will be considered in terms of the frequency paradigms and sub-paradigms. Thus, within a consideration of the intrinsic and extrinsic dimensions of the construction under discussion, the approach to frequency asymmetry as well as the notion of knowledge symmetry will be taken as preliminaries to two further objectives: firstly, to give a critical account of the problem of learnability regarding the natural order of the canonical passive construction in the process of L1 acquisition; and secondly, to suggest a logical order of teachability in respect of the same construction in the process of L2 acquisition, with the latter order addressing both the Arabic-speaking learner of English and the English-speaking leaner of Arabic.

Note that all the semantic notions that interact for the natural occurrence of the canonical passive construction will be capitalized throughout as in Agent, Patient, Location, etc. This is to differentiate these notions from grammatical categories such as subject, object, etc. Likewise, all types of grammatical Cases (which are morphologically realized at the end of bare nominals, adjectivals, and adverbials in Arabic but not in English) will also be capitalized throughout as in Nominative, Accusative, Genitive and Oblique. Capitalization, in this case, will also apply to all the derivative forms of each of these Cases (e.g. Nominative (Adj/N), Nominatively (Adv), Nominativeness (N), Nominativize (V), Nominativization (N), Nominativized (V/Adj), etc.).

1 Theory

This part will focus attention on a set of general principles and the manner in which they interact for canonical-passive formation in two genetically unrelated languages, namely, Arabic (its written variety in particular) and English, though reference will be made to some other languages where necessary. Given the assumption that the set of general principles being talked about reflect certain properties of the human mind, they are understood to yield the mental representations of the canonical passive construction as part of a genetically determined ordinance known as Universal Grammar (UG). This indicates that these principles are responsible for the typological convergence between unrelated languages, whereas typological divergence is reduced to different values of the same set of parameters that are involved in the morphological component.

Section 1.1 of this part will give a brief historical account of the paradigmatic shifts in the derivational system of UG from the 1950s to the present decade insofar as they are relevant to canonical-passive formation in Arabic and English. These are generally observable in three principal phases: First, in the TGG model up to the 1970s, the selected units in the phrase marker are strings of not necessarily ordered morphemes. Second, in the early version of the P&P model in the 1980s, the selected units are strings of uninflected lexical items. Third, in the later version of the P&P model in the 1990s, these units are selected as fully inflected lexical items. Section 1.2 will consider the canonical passive construction according to the TGG model in general, where it is said to result from the application of a transformational rule called Pass-transformation. The section will also underline the main criticisms levelled at the limitations of this rule. Section 1.3 will discuss the canonical passive construction according to the early version of the P&P model, where it is identified with 'theta-role absorption' and 'Case absorption', an identification that imposes an argument status on the Pass element. The section will also highlight the conceptual defects of this analysis as well as the inherent contradictions between its premises. Section 1.4, the final section, will introduce an alternative analysis of the canonical passive construction in the light of the later version of the P&P model. Here, the Pass element will be treated as a functional category in its own right, a treatment that is crucial for scrutinizing virtually unnoticed aspects of the construction under consideration. It should be noted, however, that our critical analysis does not intend to undermining this approach since we will be employing basically the same, but less complicated, dialectic that is typical of Chomsky's style. For the purposes of simplification and clarification, technical details will be kept to the bare minimum.

1.1 The derivational system of UG

Under any sort of linguistic analysis that is in line with the structuralist approach to language (namely, the analysis that had been pervasive up to the 1950s), the term 'surface structure' is normally used to indicate the superficial properties of a given linguistic realization (a word or a sentence), properties which are observable on at least two external levels: first, the **phonemic level** in the spoken mode of language; and second, the **graphemic level** in the written mode. Since natural language is, from a historical perspective, primarily a speech process whereby the physical representation of sound is the only observable medium of transmission, the graphemic level will be disregarded here for ease of exposition.

Within the traditional framework of what is known as Transformational-Generative-Grammar (TGG) (Chomsky, 1955, 1957), a set of transformations was designed to mediate between phrase structure (the input) and morphophonemic structure (the output). The grammar of the input has a general phrase-structure rule of the form 'Rewrite X as Y'. This rule dictates that a given derivation begins with the initial string S and continues until it reaches its terminal string by applying a sequence of 'Rewrite X as Y'. Examples (5–7) show how this mechanism works in Arabic and English:

(5) a. S
b. NP + VP
c. Det + N + VP
d. Det + N + V + NP
e. Det + N + V + Det + N

(6) a. *al* + N + V + Det + N
b. *al* + *walad* + V + Det + N
c. *al* + *walad* + *k-s-r* + Det + N
d. *al* + *walad* + *k-s-r* + *al* + N
e. *al* + *walad* + *k-s-r* + *al* + *ba:b*

(7) a. *the* + N + V + Det + N
b. *the* + *boy* + V + Det + N
c. *the* + *boy* + *break* + Det + N
d. *the* + *boy* + *break* + *the* + N
e. *the* + *boy* + *break* + *the* + *door*

The terminal string, (6e) in Arabic and (7e) in English, results in the formation of a sequence of morphemes in a given order, not necessarily in the order given here. The resultant sequence, then, passes through a set of obligatory transformations for the derivation of a simple active sentence, which may also pass through a set of optional transformations for the derivation of a more complex one. Thus, in (8) below Past is attached to

V (*k-s-r* in Arabic and *break* in English) via the application of Aux-transformation, for example (cf. section 1.2 for further detail):

(8) a. *al* + *walad* + *k-s-r* + Past + *al* + *ba:b*
    b. *the* + *boy* + *break* + Past + *the* + *door*

Such transformations may 'move' certain strings or may 'add' or 'delete' certain morphemes in order to convert the sequence of morphemes as in (8) into a sequence of lexical items. The latter sequence, then, enters into the output to be converted into a sequence of phonemes, which leads to the 'surface' realization of its final shape in exactly the same way natural sentences are heard or uttered. For example:

(9) a. Kasara al-waladu al-ba:ba.
       (Gloss: broke (3sm) the-boy (Nom) the-door (Acc))
    b. The boy broke the door.

Moreover, a simple active sentence as in (9) may also pass through a further set of optional transformations for the derivation of a more complex one. These include unitary transformations, each of which applies to a single terminal string (e.g. passivization, interrogativization, etc.) and binary transformations, each of which applies to two terminal strings (e.g. conjunction, nominalization, etc.). Thus, (9) will be converted into (10) in the course of Pass-transformation, for example:

(10) a. Kusira al-ba:bu.
        (Gloss: was broken (3sm) the-door (Nom))
     b. The door was broken.

In the standard model of TGG (Chomsky, 1965) the derivational system of Universal Grammar (UG) incorporated two further syntactic levels: 'surface structure' which is said to yield the output of the syntactic component and the input to the phonological component; and 'deep structure' which is assumed to constitute the output of the lexicon and the input to the semantic component. Accordingly, any pair of active-passive sentences such as (9) and (10) above would be treated as having different surface structures but sharing a common deep structure. However, this account is fraught with serious problems when it comes to the necessary deletion of certain constituents in the passive sentence, as will be seen in the next section (section 1.2). In fact, since their initial introduction, the levels of deep structure and surface structure have been the subject-matter of acrimonious polemics among linguists and philosophers alike, a matter that is beyond the scope of this study.[1] The important point is that, up to this stage, the morphological component was still regarded as independent from the syntactic component: phrase-structure rules as in (5–7) form terminal strings of not necessarily ordered morphemes; certain obligatory transformations in turn convert them into strings of lexical items as in (8–9), to which further optional transformations may apply as in (10).

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[1] It is worth noting that the notions of 'surface structure' and 'deep structure' can never be looked upon as a unique innovative contribution to linguistic

In the extended standard model (Chomsky, 1970) X-bar Theory was introduced to restrict the set of phrase markers that are permitted in the derivational system. This theory involves a set of principles which operate at deep structure (henceforth DS) to determine the assemblage of lexical items into phrases on the one hand, and to create a syntactic ordinance for surface structure (henceforth SS) to appear on the other. Essentially, the emphasis shifted away from particular grammatical rules that describe syntactic phenomena to general principles which interact to explain such phenomena. As a result, the lexicalist hypothesis was enunciated with the sole purpose of constraining the derivational capacity of the transformational apparatus for reasons which have to do with learnability (cf. section 2.3), and thus confining the processes inherent in the morphological component to the lexicon. This means that the elements inserted into the set of phrase markers are no longer considered a string of morphemes as mentioned above, but rather a string of lexical items, each of which must have its own inflectional features to play a role in the syntactic component. It was necessary, therefore, to differentiate lexical rules governing word formation from transformational rules, leading to the preservation of an idiosyncratic identity of the lexicon alongside the level of DS.

The crucial consequences of this lexicalist conception of grammar culminated in the early version of the P&P model (Chomsky, 1981, 1982, 1986a, 1986b). Here, the two external levels 'phonetic form' (PF) and 'logical form' (LF)[2] are maintained as a direct or indirect reflection of the

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analysis due to the very long history that lies behind them. They even have roots in the Sanskrit grammarian Panini, some 500 BC, who used the terms *vibhakti* and *ka:raka* to refer to the outer morphological shape of a given category and its inner semantic function respectively. These notions were developed in medieval Arabic linguistic theory (see, for example, Gruntfest, 1984), and were later employed by other linguists and philosophers within essentially the same paradigms (see, also, Chomsky, 1965, pp.198f., n.12).

[2] In logic the LF of a given argument *A* is the structure that is responsible for its inferential power, provided that this structure is shareable with other *As*. Accordingly, LF determines the way *A* can validly be inferred from other *As*, and the way the latter can validly be inferred from sets of premises which include

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interaction between DS and SS, these latter being the internal levels. This interaction is said to be regulated by the derivational system, which, in the later version of the P&P model, is taken as a computational system for human language (CHL). As such, the derivational system transforms a given string from one level of representation into another in terms of mapping processes. These mapping processes are in turn regulated by a general principle known as Move-alpha, where alpha is a variable ranging over all types of categories, as will be seen presently.

Recall that the set of transformations postulated in the traditional model of TGG may 'move', 'add' or 'delete' certain elements. The restriction of the capacity of the transformational apparatus within the early version of the P&P model means therefore confining it to the principle Move-alpha (which is above all responsible for 'movement') and specifying 'addition' and 'deletion' as syntactic phenomena determined by other principles of Universal Grammar (UG). Certain principles of UG are said to apply at DS level (the Projection Principle and the theta-Criterion specifically) and others at SS level (e.g. the Empty Category Principle (ECP), the Case Filter, etc.). Thus, DS is taken as the interface between the lexicon and the derivational system, whereas SS is taken as the interface between the derivational system and its independent branching to PF and LF.

Bearing this picture in mind, it appears that all lexical properties of lexical categories are structurally encoded at DS, a level of representation

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the former. To cite two traditional syllogisms:

(i) a. *all men are mortal*
    b. *Socrates is a man*
    c. *therefore, Socrates is mortal*

(ii) a. *all linguists beat about the bush*
    b. *that ostrich is a linguist*
    c. *therefore, that ostrich beats about the bush*

The LF, here, can be symbolized algebraically, geometrically or whatever by abstracting away from the particular subject-matter, and considering either syllogism of the form (iii), valid for any possible world, including worldly experience:

(iii) a. *all Xs are Y*
    b. *a is X*
    c. *∴ a is Y*

By analogy, the LF of a given linguistic expression *S* is its structure (say, the canonical passive structure) which is responsible for its inferential power and shareable with other *Ss*, but whose formal aspects have to be associated with aspects of worldly experience.

that is mapped onto SS by the principle Move-alpha. SS in turn surfaces at PF and LF by means of the same principle. This structural encoding, which seems to be algebraic in nature, is represented in terms of phrase markers in the X-bar format. As a result, DS reflects the lexical properties of lexical categories directly, while SS reflects them indirectly before it branches to PF and LF, as in the case of the selectional properties of Vs, for instance. Now before defining each of the principles that play a significant role in canonical-passive formation, let us first give a brief account of how categories are structurally encoded in the X-bar format.

In its initial incarnation, the X-bar Theory is said to constrain the set of phrase markers that are permitted in a given derivation, where they are represented in the form of rule schemata following the general phrase-structure rule 'Rewrite X as Y' shown in (5–7) above. Yet the representation here concerns the overall categorical structure of these markers and posits them in terms of three distinct levels of projection (viz. X, X′ and X″) as illustrated in (11) (cf. Jackendoff, 1977):

(11) a. X″ → {Spec, X′}
b. X′ → {X, Y″}

Here, the curly brackets indicate an unordered set of two elements where the order is determined by the head parameter, that is, whether the language type is head-first or head-last. Notice that the former holds for both Arabic and English. The head X is the zero-bar projection of a given category; X′ is the single-bar projection of X; and X″ is the double-bar or maximal projection of X. The specifier Spec stands for Det in the case of NPs, for example, and Y″, which acts as the complement of X, is the maximal projection of another head Y. The maximal projection of any head is defined in terms of its phrasal projection (i.e. X″ and Y″ are in fact XP and YP respectively). Thus, the maximal projection of the head V is V″ (= VP); the maximal projection of the head N is N″ (= NP); and so forth. For example:

(12) a. [VP [V′ [V *kasara*] [NP *al-ba:ba*]]]
b. [VP[V′ [V *broke*] [NP *the door*]]]

Furthermore, following Fassi Fehri (1980), among other generative linguists, Chomsky (1986b) extended the X-bar format to include functional categories such as I (inflectional features) and C (complementizers). The former category acts as the head of S (the zero-bar projection of a given linguistic expression) and the latter as the head of S′ (the single-bar projection of S), an injunction which signifies that IP and CP stand for S and S′ respectively. These functional categories undergo the projection cycle in the same way as any other lexical category does, as shown in the following abstract structure:

(13) [CP Spec [C′ C [IP Spec [I′ I [VP Spec [V′ V NP]]]]]]

Here, the I-node (the head of IP) is the position occupied by inflectional features like Tns (tense) and Agr (agreement), and the C-node (the head of CP) is the position occupied by complementizers. Thus, the Spec of IP specifies the position of the subject NP, whereas the Spec of CP specifies the position of WH-phrases, which are not to be dealt with in this study. Furthermore, the Spec of VP specifies the position of the object NP in the case of transitive verbs. For the generation of a given linguistic expression S, X-bar Theory is said to involve the application of various principles, some of which will be considered briefly insofar as they are directly relevant to canonical-passive formation in Arabic and English. These are: the Projection Principle, the theta-Criterion, the Case Filter, and the Empty Category Principle (ECP).

(i) The Projection Principle

The Projection Principle requires that representations at various levels be projected from the lexicon onto the syntax of a given derivation. This is to ensure that that derivation observes the sub-categorization properties of lexical categories, viz. their c(ategorical)-selectional properties (cf. Chomsky, 1981, p.29). In the case of Vs, for instance, the principle determines the number and type of complements, if any, that a given V has to c-select. That is, it captures part of the information about the 'valency' of that V, a term used by Tesnière to describe the number and type of dependants, or participants, with which V has the potential to combine (cf. Tesnière, 1959, pp.238f.). This information is structurally represented in the form of what is known as the sub-categorization grid of V as in (14) below, where the underlined gaps indicate the placement of the Arabic verbs and their English counterparts. Notice that the verbs in (14c) c-select one of two possible sub-categorization grids, viz. [NP PP] and [NP NP].

(14) a. *inkasara/break* (intr.) [__]
b. *kasara/break* (tr.) [__ NP]
c. *a?̲t̲a:/give* [__ NP/NP PP/NP]
d. *wad̲a?̲a/put* [__ NP PP]

(ii) The theta-Criterion

The theta-Criterion constitutes the basic principle of theta-Theory and determines the thematic relations between constituents which are treated as arguments. In Chomsky's words: "Each argument is assigned its theta-role in exactly one theta-position [...], and each assignable theta-role must be assigned to an argument" (Chomsky, 1986a, p.184). While the Projection Principle formally encodes the c-selectional properties of Vs in their sub-categorization grids as in (14), the theta-Criterion represents the s(emantic)-selectional properties of these Vs in their theta-grids as in (15) below. That is, the theta-Criterion regulates the distribution of the theta-arguments that a given V has to s(emantically)-select.

(15) a. *inkasara/break* (intr.) [Patient]
  b. *kasara/break* (tr.) [Agent Patient]
  c. *a?ta:/give* [Agent Patient/Recipient Recipient/Patient][3]
  d. *wada?a/put* [Agent Patient Location]

Arguments which are assigned theta-roles such as these are said to have a referential function, whereas arguments which do not have this function are not assigned theta-roles such as the nominal expletive in the so-called impersonal passive (cf. section 1.3). Given the close connection between the Projection Principle and the theta-Criterion, the former can be extended to account for the subject NPs which do not appear in the subcategorization grids as in (14) but feature as theta-arguments in the theta-grids as in (15). This is to maintain the inherent one-to-one relationship between subcategorization and theta-marking (cf. Chomsky, 1981, p.39; Chomsky, 1982, p.10).

(iii) The Case Filter

The Case Filter forms the basic principle of Case Theory and regulates the possible distribution of the NPs that occupy Case-marked positions.

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[3] It is worth noting here that verbs such as *a?ta*: in Arabic and *give* in English s-select one of two possible theta-grids as illustrated in (ia-b):

(i) a. [Agent Patient Recipient]
  b. [Agent Recipient Patient]

The s-selection of either theta-grid is thus determined by the degree of pragmatic significance of the theta-arguments Patient and Recipient specifically, as is evident in the following examples from Arabic and English:

(ii) a. a?ta: zaydun al-kita:ba li-?amrin.
  (Gloss: gave (3sm) Zaid (Nom) the-book (Acc) to-Amr (Obl))
  b. Zaid gave the book to Amr.

(iii) a. a?ta: zaydun ?amran al-kita:ba.
  (Gloss: gave (3sm) Zaid (Nom) Amr (Acc) the-book (Acc))
  b. Zaid gave Amr the book.

Clearly, therefore, the verbs *a?ta:* and *give* in (iia-b) s-select the theta-grid in (ia), whereas the same verbs in (iiia-b) s-select the theta-grid in (ib).

That is, it completes the overall picture initiated by the two previous principles for such NPs, and ensures that each NP is assigned Case as long as it is phonetically realized. This means that if an NP is phonetically realized and assigned no Case, then this NP is ruled out: "*NP if NP has phonetic content and has no Case" (Chomsky, 1981, p.49). Thus, the Case grids for the Vs cited above are illustrated in (16) below. Notice, again, that there are two possible Case grids for the verbs in (16c), viz. [Nom Acc Obl] and [Nom Acc Acc] (see also note 3).

(16) a. *inkasara/break* (intr.) [Nom]
b. *kasara/break* (tr.) [Nom Acc]
c. *a?ta:/give* [Nom Acc/Acc Obl/Acc]
d. *wada?a/put* [Nom Acc Obl]

The syntactic precondition for Case-assignment is 'government', since a given NP is assigned Case by the head that 'governs' this NP.[4] Thus, returning to the abstract structure in (13), Nominative is assigned to the subject NP in [Spec, IP] position by Tns inside I, Accusative is assigned to the object NP in [Spec, VP] position by V, Oblique is assigned to the NP that is the object of P in [Spec, PP] position by P, and so forth. In the case of R(eference)-expressions, Case-assignment is morphologically realized in Arabic, but not in English, as is evident in most of the glossed examples cited throughout (see also note 4).

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[4] Notice that I am avoiding the use of the term 'Government-and-Binding' (GB) for the early version of the P&P model (Chomsky, 1981, 1982, 1986a-b) though it is still used by numerous linguists. The term, in and of itself, is misleading from a conceptual standpoint (cf. Chomsky, 1988b). Perhaps this is because of its unnecessary conceptual centralization of Government and Binding, which are above all postulated as general principles of UG among others.

Government regulates the relationship between any two categories which c-command each other, provided that one is a lexical category and a governor and the other is a maximal projection (i.e. XP) and a governee (cf. Chomsky, 1986a, p.162). For example :

(i) a. [VP [V *kasara*] [NP_1 *al-waladu*] [NP_2 *al-ba:ba*]]
(Gloss: broke (3sm) the-boy (Nom) the-door (Acc))
b. [NP_1 *the boy*] [VP [V *broke*] [NP_2 *the door*]]

Where V governs NP_2 because both categories c-command each other, and V is a lexical category and NP_2 is a maximal projection. Thus, the relevance of Case Theory is perceivable from this relationship. That is, V governs NP_2 also because V assigns Case to NP_2 (i.e. Acc), assignment which is morphologically realized in Arabic but not in English.

Binding determines the distribution of categories in relation to locality conditions on Government. These conditions are: (i) an anaphor is bound in a local domain; (ii) a pronominal is free in a local domain; and (iii) an R-expression (reference-expression) is free. Here, 'local domain' is referred to as a 'governing category' which is a maximal projection containing the category in question and a subject, a matter that is beyond the scope of this study.

(iv) The Empty Category Principle

The Empty Category Principle (ECP) concerns locality conditions on the distribution of certain empty categories such as the NP-trace and the WH-trace in relation to their antecedents. Move-alpha, therefore, acts as the immediate trigger for the operation of the ECP, since the former is said to regulate NP-movement and WH-movement among other types of movement. Of prime concern here is NP-movement and the trace *t* that this NP leaves behind. This movement proceeds from one argument position (A-position) to another, the former being theta-marked and the latter non-theta-marked in accordance with the theta-Criterion discussed above. The result of NP-movement is therefore the theta-marked trace *t* whose relationship to this NP is regulated by the ECP. Notice that there are other types of empty categories such as *pro* and PRO, but these do not result from the application of Move-alpha (cf. section 1.4).

Essentially, the ECP requires that the resultant trace *t* be configurationally related to its antecedent (the moved NP) in a manner that satisfies 'proper government'. In Chomsky's words: "a non-pronominal empty category must be properly governed" (Chomsky, 1986b, p.17). Proper government is thus defined in terms of antecedent-government (i.e. government by co-indexation and m(aximal)-commanding): a moved NP is said to properly govern its trace *t* if the NP antecedent-governs *t*; a moved NP is said to antecedent-govern its trace *t* if the NP is co-indexed with *t* and m-commands it (cf. Rizzi, 1990, pp.6f.). To illustrate how this mechanism operates in the canonical passive construction in Arabic and its counterpart in English, consider the following examples:

(17) a. [VP *kusira*] *al-ba:bu*$_i$ [t_i]
(Gloss: was broken (3sm) the-door (Nom))
b. *The door*$_i$ [VP *was broken* t_i]

In both examples the trace *t*, the underlying position of the direct object, is theta-marked by the basic form of the verb, viz. *kasara* in Arabic and *break* in English. Due to Move-alpha, the trace *t* is left by the NP that has moved to subject position where it is assigned Nominative Case. Case assignment is morphologically realized in Arabic as in *al-ba:bu* in (17a) but not in English as in *the door* in (17b). The index *i* indicates that the trace *t* is co-indexed with its antecedent (the moved NP) in an m-commanding relation. Therefore, the moved NP in both examples is said to antecedent-govern its trace *t* in accordance with the ECP. The only difference in NP-movement between the two is that in (17b) it involves crossing over the maximal projection VP which is a barrier, whereas in (17a) it does not. This is ascribable to the VSO-SVO variation between Arabic and English, respectively.

Having illustrated the salient features of the principles which are directly apposite to canonical-passive formation in Arabic and English, it appears that such principles do not function in isolation, but rather they interact with each other to meet the well-formedness conditions of a given derivation. As mentioned above, some of these principles apply at DS level, viz. the Projection Principle and the theta-Criterion, and others at SS level, viz. the Case Filter, the Empty Category Principle (ECP), etc. This contention was based on the assumption that the derivational system of UG selects lexical items from the lexicon by means of a more general principle called Satisfy, an all-at-once operation which mediates between the lexicon and DS in order to present the selected lexical items in the X-bar format discussed above. Yet a linguistic expression S resulting from the free application of UG principles such as these was held to be evaluated separately in that it is well-formed if it does not violate any of such principles.

Within the later version of the P&P model (Chomsky, 1995b), where the derivational system is now identified as a computational system for human language (CHL), particular emphasis has been placed on well-formedness conditions at the external levels of PF and LF due to the absence of any concrete parallelism to such conditions at the internal levels of DS and SS. While PF-LF representations may pertain to the realistic side of language, DS-SS representations, being the abstract levels, may not. Thus, PF interfaces derivations with the linguistic aspects involved in the articulatory-perceptual mode and LF with the non-linguistic aspects involved in the conceptual-intentional mode. It follows that if the well-formedness of a given derivation can be evaluated at PF and LF, then evaluation at DS and SS will certainly prove to be superfluous. In such a perspective, the grammar is said to be 'minimalized' through the elimination of DS and SS, and with them the all-at-once property of Satisfy (cf. Chomsky, 1994; Chomsky, 1995a-b; El-Marzouk, 1995b).

Minimalization of the grammar means therefore confining it to economy of derivation where a set of transformations similar to that of the traditional model of TGG is proposed to mediate between the lexicon and the external levels of PF and LF. This set also comprises unitary and binary transformations as mentioned above but the elements inserted here are fully inflected lexical items whose features are checked off when Move-alpha applies. For lexical access, then, the computational system CHL selects lexical items freely and converts them into phrase markers satisfying a format which is similar in spirit to that of the X-bar Theory. This is to ensure grammatical comparison or 'competition' among derivations, rather than separate evaluation of a single derivation, since CHL may construct a set of distinct structures out of the same selected set of lexical items. At any point, CHL reaches a level termed Spell-Out, a level that determines which movements will affect the PF representation of the 'winning' derivation. After Spell-Out, CHL has no further access to the lexicon, but it may proceed further, applying Move-alpha, to ensure that that derivation converge at PF and LF, otherwise it crashes (cf. Chomsky, 1994; Chomsky, 1995a-b; El-Marzouk, 1995b).

The notion of feature checking has resulted in arguments for a number of functional categories in the later version of the P&P model. Recall that the I-node in the early version is the position occupied by inflectional features such as Tns and Agr (cf. the abstract structure in (13) above). In the later version, these features are treated as functional categories in their own right, provided that Agr is split up into Agrs (subject agreement) and Agro (object agreement) (cf. Chomsky, 1995b, p.95). This is to eliminate the odd dual function of both I (as a holder of Tns and Agr) and Agr (as a holder of Agrs and Agro), and to maintain the generalized recursiveness of the projection cycle which now requires that every category, be it lexical or functional, should be maximally projected from the lexicon. Thus, the abstract structure in (13) is expanded as in (18) below, where the order of the functional categories being talked about is [Agrs, Tns, Agro]:

(18) [CP Spec [C' C [AgrsP Spec [Agrs' Agrs [TnsP Spec [Tns' Tns [AgroP Spec [Agro' Agro [VP Spec [V' V NP]]]]]]]]]

This indicates that, apart from the complementizer phrase CP, the phrasal categories AgrsP, TnsP, and AgroP are all responsible for the inflectional features of V as sister of NP,[5] for which reason such phrasal categories are often referred to as the IP-group. Moreover, this IP-group has been expanded still further to include phrasal categories such as AspP (Aspect Phrase) and PassP (Passive Phrase) among others (cf. Ouhalla, 1991). For ease of exposition in this study, the terms AgrP, TnsP, and PassP will be used to represent the main inflectional features of the canonical passive verb (cf. section 1.4).

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[5] To avoid possible confusion, the term NP will be preserved as the maximal projection of any nominal though in recent publications the term DP is used instead. As is well known, the DP-analysis, first introduced in Abney (1987), accommodates Det as the head of DP and NP as the complement of this head, an analysis which plays no significant role in this study.

One of the crucial distinctions between the early version and the later version of the P&P model is explicable in terms of the corresponding distinction between government and feature checking, and therefore between the sorts of structural mutation that either process entails in the derivational history of a given linguistic expression S. In the early version, Vs and Ns move to incorporate their IP-features and Case-features respectively, whereas in the later version such categories are said to move to check their features off, since they are drawn from the lexicon as fully inflected lexical items. If the feature checking process occurs in the appropriate position, then the generated structure will be licensed by Spell-Out to converge at PF and LF. If, however, the feature checking process does not occur in the appropriate position, then that structure will crash at PF.

The final point to be made here concerns the status of UG principles such as those discussed above. Given that the internal levels of DS and SS are dispensed with in the later version of the P&P model, one might believe that these principles are also dispensed with because some apply at DS and others at SS, as seen earlier. However, the notion of feature checking implies that these principles, which are above all largely responsible for the IP-features of Vs and the Case-features of Ns, apply at some point in the derivation before CHL proceeds. In order to maintain this line of research, we will assume that the workings of these principles synchronize with lexical insertion, given that the lexicon permits open access to fully inflected lexical items. The next section will consider the canonical passive construction in Arabic and English according to the TGG model and the problems that arise from this model.

1.2 Passivization in the TGG model

As discussed at the outset of the previous section, phrase-structure rules of the general form 'Rewrite X as Y' are said to generate terminal strings of not necessarily ordered morphemes in order to be converted ultimately into strings of phonemes. Accordingly, these terminal strings would reflect unnatural representations of linguistic expressions Ss, given their tenseless and noncombinational nature, as illustrated in the following examples from Arabic and English (see also examples (5-7) above).

(19) a. Det + N + V + Det + N

b. *al + walad + k-s-r + al + ba:b*
c. *the + boy + break + the + door*

This clearly indicates that phrase-structure grammar on its own is inadequate to account for certain syntactic phenomena, even though such a grammar was proved to be more powerful than the so-called finite-state grammar, a simple set of rules that generate linguistic expressions where each element is entirely determined by the nature of the preceding element.[6] It was necessary, therefore, to supplement phrase-structure rules with a set of obligatory transformations for the 'natural' derivation of simple active sentences which can be complexified by a further set of optional transformations. One such obligatory transformation is known as Aux-transformation which results in a configuration where Aux, together with the basic form of V, is immediately dominated by VP in the phrase marker. This transformational rule specifies the Tense feature of V (say, Past) to be inserted in the terminal string as an abstract morpheme. Thus, Past is branched to the left of V in the phrase marker, thereby converting (19b-c) into (20a-b):

(20) a. *al-walad* [VP [Past [V *k-s-r*]]] *al-ba:b*
b. *The boy* [VP [Past [V *break*]]] *the door*

Another obligatory transformation is known as Affix-hopping which is said to regulate the morphological unit or units attached to a given V, for instance, for signalling the temporal location of the event which is assigned by the basic lexical form of that V. This is to capture the fact that such units do not occur side-by-side in the output of natural speech. As the term 'hopping' implies, the morphological unit in question is shifted from one node to another in the phrase marker to be 'affixed' into the basic lexical form of V. Thus, Past would be immediately dominated by the V-node and attached to the right of the basic form of V, thereby converting (20a-b) into (21a-b):

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[6] As a simple generative device, finite-state grammar is said to operate through a given sentence from its 'initial state' to its 'final state'. In our examples:

(i) a. kasara al-waladu al-ba:ba.
(Gloss: broke (3sm) the-boy (Nom) the-door (Acc))
b. The boy broke the door.

The grammar would begin by selecting one of the set of all possible elements which occur first in the output such as *kasara* in Arabic and *the* in English. It would thus proceed from the initial state of this output to select one of the set of all possible elements which occur next, and continue until it reaches the final state. Yet this entails the possibility that finite-state grammar deals only with continuous constructions as in (ia-b) and leaves discontinuous constructions as in (iia-b) below unexplained.

(ii) a. kasara al-waladu allathi: yajlisu huna:ka al-ba:ba.
(Gloss: broke (3sm) the-boy (Nom) who (3sm) sit (3sm) there (Acc) the-door (Acc))
b. The boy who is sitting there broke the door.

(21) a. *al-walad* [VP [V *k-s-r* Past]] *al-ba:b*
b. *The boy* [VP [V *break* Past]] *the door*

The functioning of the obligatory transformation Affix-hopping seems, therefore, to be crucial for scanning a complete picture of the derivational history of a given linguistic expression S. This is because phrase-structure grammar on its own not only yields unnatural representations of linguistic expressions as in (19) above but also leaves entirely unexplained the significant relationship (both syntactic and semantic) between a simple active sentence and its canonical passive version as in (22) below. For ease of exposition of this relationship, let us put the Arabic examples aside for the moment and consider the manner in which such a grammar operates for the English counterparts.

(22) a. The boy broke the door.
b. The door was broken by the boy.

Given the clear syntactic and semantic relationship between pairs of active-passive sentences such as (22), a grammar that handles the overt syntax of a given derivation exclusively by means of phrase-structure rules would generate either sentence independently on the basis of an autonomous phrase-structure rule as in (23) for the simple active sentence and (24) for its canonical passive version. Derivational dependency in such a perspective was thus a significant structural condition in the TGG model, though other models such as Lexical Functional Grammar (LFG) would view the relationship as purely lexical, a matter which is not to be addressed in this study.

(23) a. S
b. NP + V + NP

(24) a. S
b. NP + *be* + V + *by* + NP

However, autonomous phrase-structure rules such as (23–24) would certainly imply that the generation of a given sentence is nothing more than a lacklustre and mechanical operation whereby the purely structural relationships between the immediate constituents of that sentence act as the only precondition for the arrival at its final shape in the output. Because variables like NP and V are such immediate constituents, phrase-structure rules would also imply that the relationship between a simple active sentence and its canonical passive version as in (22) is both arbitrary and fortuitous, and thus the only loosely common denominator between these two sentences is their structural status which shows that they are both sentences. Furthermore, such rules would not be in a position to guarantee ruling out sentences such as (25) below as ungrammatical, since the output represents nothing more than strings of not necessarily ordered morphemes (see, for example, Harris, 1993, pp.44f.).

(25) a. * The door broke the boy.
b. * The boy was broken by the door.

Given that information about the grammaticality of (22) and the ungrammaticality of (25), for instance, is part of the native speaker's internalized knowledge of language, there seems to be an obvious systematic relationship between an active sentence and its canonical passive version. An adequate grammar should be able to account for this information by generating well-formed sentences like (22) and eliminating ill-formed sentences like (25). However, phrase-structure grammar would only be capable of doing so to the detriment of unintuitive redundancy. An adequate grammar should also be able to specify the set of all possible NPs that the transitive verb *break* in English, for instance, may take as its subject and object both in the simple active sentence and its canonical passive version, notwithstanding the strict inversion of the two sentences. That is, on the one hand, the subject must be able to break things and the object must be breakable in the active sentence; and on the other, the subject must be breakable and the object of *by* must be able to break things in the passive version.

In order to give a much more reasonable account of these existing facts, it was found necessary to postulate an optional transformational rule known as Pass-transformation, an algebraic operation which has its potential scope and its potential limits. Within its potential scope, Pass-transformation is said to be far more powerful than the autonomous phrase-structure rules shown in (23) and (24). Within its potential limits, however, it also leaves completely unexpressed certain important facts about the canonical passive construction in Arabic and English, as will be seen presently. The algebraic formula of Pass-transformation is illustrated in (27) below, with the rule in (26) being its input. Notice that this formula is a simplified version of the one introduced in Chomsky (1957, p.73).

(26) a. S
b. NP_1 V NP_2

(27) a. NP_1 V NP_2
b. NP_2 *be-en* V *by* NP_1

This algebraic formula can be interpreted in the following way: First, the rule in (26) requires that the input (26b) generate only grammatical active sentences as its output, viz. active sentences such as (22a), to which the obligatory transformation Affix-hopping has already applied (cf. (21)). Second, the rule in (27) requires that the same input become the input for the optional transformation Pass-transformation as in (27a). Third, the rule in (27) also requires the application of the obligatory transformation Affix-hopping to shift the affix *-en* in (27b) to the right of V in the phrase marker for the generation of the canonical passive version (22b) as its output. In the light of these three requirements, the derivational history of either output is shown below, with (28) being the input for the simple active sentence and (29) the input for the canonical passive version.

(28) a. *the + boy + break + the + door*
b. *The boy* [VP [Past [V *break*]]] *the door*
c. *The boy* [VP [V *break* Past]] *the door*

(29) a. *The boy* [VP [Past [V *break*]]] *the door*
b. *The door* [VP [Past *be-en* [V *break*]]] *by the boy*
c. *The door* [VP [*be* Past [V *break-en*]]] *by the boy*

This analysis was based on the assumption that the relationship between an active sentence like (22a) and it canonical passive version (22b) is neither arbitrary nor fortuitous, but rather is both structural and derivational. That is, both sentences appear to be identical at some level of representation, viz. the representation in (28b) and (29a) which is generated by the obligatory transformation Aux-transformation as we saw above (cf. also examples (20a–b)). Accordingly, the conclusion that any pair of active-passive sentences are derived from a common source in their derivational history was generalized across all languages instantiating the canonical passive construction.

However, in the course of the continuous evaluation of the TGG model, several empirical problems with this conclusion were recognized. One such problem is posed by the agentive PP in the passive sentence. Recall that phrase-structure rules generate terminal strings of not necessarily ordered morphemes such as (28a) to be the output of the phrase-structure representation [S: NP + VP] (cf. also (5–7) and (19)). Recall, again, that this terminal string undergoes a set of obligatory transformations such as Aux-transformation which yields the representation in (28b) on the one hand, and Affix-hopping which yields the representation in (28c) on the other. Recall, further, that the latter representation constitutes the input for a simple, declarative and active sentence such as (22a). Now if it is indeed the case that active-passive sentences start in the course of their derivational history from the same level of representation shown in (28b) and (29a), then the optional transformational rule Pass-transformation, which yields the representation in (29b), can only be understood to have two functions, viz. movement and addition. First, it moves the object in the active to be the subject in the passive, and moves the subject in the active to be the object of *by* in the passive. Second, it adds the Aux *be* and the Aff *-en* to create a 'new' V-complex, and adds the P *by* to create a 'new' PP-complex.

But the preposition *by* in the case of the English passive is above all a free morpheme, an autonomous category which has its own lexical status, and should therefore be treated in the history of derivation as a single element occupying a single position (not to mention the case of the Arabic passive where the counterpart of this preposition may involve more than a single element).[7] Keeping this proviso in mind, a free morpheme such as *by* should be generated by phrase-structure rules, not by transformational rules, and should accordingly be inserted in the string of not necessarily ordered morphemes at some level of representation. As I understand it, the consequences of the optional transformational rule Pass-transformation, which adds the P *by* at a later level of representation, will be catastrophic to its output. That is, a free morpheme such as *by* should be 'familiar' to the string of not necessarily ordered morphemes from the very outset of derivational history, otherwise the whole derivational construction of this string will be in a state of 'destruction' if a 'strange' body called the P *by* is inserted by a transformational rule called Pass-transformation at a later level represented in (29b). As a result of this 'strangeness', no definite phrasal category can be specified for the 'new' PP-complex, since Pass-transformation has no access to phrase-structure rules at this level. In a 'revised' version of the TGG model, the insertion of the PP-complex was accounted for in terms of what is known as 'Chomsky-adjunction' so as to underline its optionality. Yet, this may well entail the danger of confusing empirical statements with logical ones, as will be seen later in this section.

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[7] Generally speaking, the agentive PP in the Arabic canonical passive does not surface in the structural output in the unmarked situation. In certain rare cases, however, this agentive PP can be expressed overtly for reasons to be spelled out later in part 2 of this study. The main point to be made here is that, in such cases, P in the agentive PP may take the form of a single element such as *min* 'from', *bi* 'by/with, *?̱inda* 'at', etc. It may also take the form of more than a single element as in *min ladun* 'from' and *?̱ala: lisa:ni* 'on the tongue of' (cf. section 2.1, note 27).

What is more, a more serious problem is posed by the deletion of the 'new' PP-complex itself. Pass-transformation, as it stands in (27), presupposes the insertion of this complex into the output, viz. the output of the representation in (29c). How, then, could such a transformational rule account for the extremely predominant agentless nature of the canonical passive construction? As is often reported in the literature, approximately 85% of the natural instances of this construction in English are agentless (viz. the so-called 'short passive') (see, for example, Siewierska, 1984, p.38; Thompson, 1987, p.498). Actually, the problem will be far worse in the case of Arabic, since the percentage of agentless passives is much higher (approximately 95%) (cf. section 2.1). Suppose for the moment that Pass-transformation in (27) is generalized across Arabic, and that its algebraic formula is shown in (31) below, with the rule in (30) being its input as well. Notice that the VSO-order in this language is taken into consideration.

(30) a. S
b. V NP_1 NP_2

(31) a. V NP_1 NP_2
b. Pass V NP_2 P NP_1

(where Pass is the set of all affixes which mark the passive morphology of V, and P is the set of all prepositions which may be used to denote agency (see note 7)). Here, the interpretation will entail the same three requirements adumbrated above in that (30) provides the input for a grammatical active sentence and (31) provides the same input for Pass-transformation which, in turn, provides the input for the canonical passive version. That is, the rule in (31b) still requires the application of Affix-hopping to shift the Pass element to the right of V in the phrase marker. However, as we will see later in part 2, there exist only a few exceptional cases of the Arabic passive in which the agentive PP may surface in the output (cf. section 2.1, note 27). Thus, to generalize a marked property of the canonical passive construction over the unmarked property via a transformational rule such as (31) is in fact to identify the exceptional as the normal. On this account, Pass-transformation cannot be perceived as a rule which adds P, since the derivational history of the Arabic counterparts of English active-passive pairs such as (22) necessitates that this P as well as its object be deleted at some level. This history may be represented in something like (32) and (33) below, with their outputs being (34) and (35) respectively (cf. also (28) and (29) above).

(32) a. *k-s-r + al + walad + al + ba:b*
b. [VP [Past [V *k-s-r*]]] *al-walad al-ba:b*
c. [VP [V *k-s-r* Past]] *al-walad al-ba:b*

(33) a. [VP [Past [V *k-s-r*]]] *al-walad al-ba:b*
b. [VP [Past Pass [V *k-s-r*]]] *al-ba:b*
c. [VP [V *k-s-r* Pass Past]] *al-ba:b*

(34) a. kasara al-waladu al-ba:ba.
(Gloss: broke (3sm) the-boy (Nom) the-door (Acc))
b. The boy broke the door.

(35) a. kusira al-ba:bu.
(Gloss: was broken (3sm) the-door (Nom))
b. The door was broken.

More significantly, if Pass-transformation can be taken as a working operation at all, then it seems to be limited to transitive verbs only, owing to the obligatory insertion of the object NP into its input (i.e. NP_2 in (27) and (31) above).[8] As such, it addresses only particular instances of the so-

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[8] Chomsky claimed that restricting Pass-transformation to transitive verbs was motivated by the elimination of the unpassivizable version of verbs like *resemble, have, marry, fit, cost, weigh,* etc. He was, therefore, forced to treat canonical passivization and what he called 'pseudo-passivization' by two separate transformational rules. Notice that I am not using the misleading term 'middle verbs', a term which Chomsky himself borrowed from Lees (1960, p.8) to describe these verbs (cf. Chomsky, 1965, pp.103f.). First of all, verbs such as these can never be used intransitively as they always necessitate an Accusative NP, whether they are unpassivizable as in (i) or passivizable as in (ii) or represented marginally in a marked situation as in (iii):

(i) a. John married Mary.
b. The suit fits me.
c. The car weighed two tons.

(ii) a. The preacher married John and Mary.
b. The tailor fitted me.
c. John weighed the letter.

(iii) a. Recourse was had to a new plan.
b. A good time was had by all.

How, then, can such verbs be eliminated if in each case they necessitate an Accusative NP? Secondly, by specifying V as a transitive verb in the input, Pass-transformation also implies that transitivity is a decisive precondition for canonical passivization, a position which was already held by most traditional grammarians and linguists in the early part of this century (see, for example, Siewierska, 1984, p.4). Pass-transformation could have been much more reasonable, and therefore generalizable, if this V was simply specified as a called 'personal passive' and leaves completely unexplained the so-called 'impersonal passive', and in this case the TGG approach to canonical passivization (or any other syntactic process, for that matter) would not be in better position than the traditional approach referred to in the current study (see also note 8). Because of the restriction of Pass-transformation to transitive verbs, it was necessary to postulate an independent Pass-transformation whose input would permit the insertion of intransitive verbs (cf. Chomsky, 1965, p.104). As a consequence, Pass-transformation cannot be perceived as a unified transformational rule generating the canonical passive construction as a unified syntactic phenomenon.

In the standard model of TGG the common source from which any pair of active-passive sentences were assumed to derive was identified with the notion of deep structure (DS) explained in the preceding section, and thus an alternative treatment of canonical passivization was in order. The injunction was to widen the scope of Pass-transformation a little further: primarily via the combination of the two transformational rules (so that both transitive and intransitive verbs would be captured), and secondarily via scanning the derived phrase marker of the passive sentence within this scope, and therefore eliminating an *ad hoc* phrase-structure rule for the derived constituent structure. This injunction was motivated by the association of canonical passivization with verbs that take Manner adverbials freely, an observation signifying that verbs which do not take Manner adverbials freely would not undergo Pass-transformation. Hence, English verbs such as *resemble, have, marry, fit, cost, weigh,* etc. were exemplified in empirical corroboration of this observation where (36) below would represent the former verb class and (37) the latter (see Chomsky, 1965, p.103, for further examples).

(36) a. Mary was married by John (the preacher).
b. I was fitted by the tailor.
c. The letter was weighed by John.

(37) a. * Mary was married by John (the groom).
b. * I am fitted by the suit.
c. * Two tons are weighed by this car.

Recognition of these existing facts, among others, led research to eliminate the algebraic formula of Pass-transformation illustrated in (27) above for reasons which had to do mainly with presupposed generalizability, and thus a completely different direction was taken in respect of

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passivizable verb in the input, so as to exclude examples such as (i) and to include examples such as (ii) and (iii).

canonical passivization as a unified syntactic phenomenon to be generated by a unified transformational rule. Accordingly, an alternative algebraic formula was proposed with the sole purpose of restricting Pass-transformation to verbs that take Manner adverbials freely such as the passivizable versions of the English verbs just mentioned. In the case of English, this formula is shown in (38c) below, with (38b) being its direct input and (38a) its indirect one. Notice, again, that this formula is a modified version of the one introduced by Chomsky (1965, p.104):

(38) a. Manner Adv → *by* Pass
b. NP_1 V X NP_2 Y *by* Pass Z
c. NP_2 V X Y *by* NP_1 Z
(where X does not contain an NP)

This algebraic formula was based on the assumption that the Manner adverbial in question should necessitate an element to be associated with canonical passivization as one of its realizations, a 'dummy element' which signifies that Pass-transformation must obligatorily apply as a substitution rule. Thus, the interpretation of the algebraic formula in (38) may run as follows: Firstly, the indirect input (38a) restricts passivization to verbs that take Manner adverbials freely, be they transitive or intransitive. Secondly, the direct input (38b) requires that one such verb will appear under the V-node only if it is positively selected from the lexicon; X could be occupied by P (in the case of phrasal verbs) and Y and Z by PP and Manner Adv freely. Thirdly, Pass-transformation then substitutes NP_1 for the dummy element Pass and Places NP_2 in the position of NP_1 as in (38c).

Under this analysis, any pair of active-passive sentences are now said to derive from essentially the same underlying DS (cf. Chomsky, 1965, p.23), provided that Pass-transformation is an obligatory substitution rule. Furthermore, the agentive PP in the canonical passive version can now be understood as an optional category, given the generalization of this rule over transitive as well as intransitive verbs. This means that Pass-transformation cannot be understood as responsible for adding the P *by*, since the agentive PP can be deleted as in (39a–b) below and inserted as in (39c), even though all sentences are generated by the same rule whereby the subject NP_1 is unspecified in the former as in (40a–b) and specified in the latter as in (40c) (cf. Chomsky, 1965, p.104).

(39) a. The proposal was vehemently argued against.
b. The new course of action was agreed on.
c. John is looked up to by everyone.

(40) a. NP_1 *vehemently argued against the proposal by* Pass
b. NP_1 *agreed on the new course of action by* Pass
c. *everyone looks up to John by* Pass

Pass-transformation as shown in (38) is also said to capture the correlation between strictly local sub-categorization and strictly local transformations, the former specifying which categories are internal to VP (i.e. which are V-complements) on the one hand, and which are external to it (i.e. which are VP-complements) on the other. Given that the dummy element Pass is one of the categories that are internal to VP, it follows that if a PP is locally sub-categorized as a V-complement then V is subject to Pass-transformation. This would account for the grammaticality of (41a) where the PP *at this job* is a V-complement and the ungrammaticality of (41b) where the PP *at this office* is a VP-complement. By the same token, the ambiguity of the active version of (41c) would also be cleared up, since the 'PP' *on the boat* is a V-complement (cf. Chomsky, 1965, p.105).

(41) a. This job is being worked at quite seriously.
b. * The office is being worked at.
c. The boat was decided on.[9]

Although Pass-transformation in the standard model in (38) seems to offer a much more satisfactory account of canonical passivization than the previous one in (27), as is evident from the above quite comprehensive analysis, its presupposed generalizability, however, is still fraught with a number of serious complications when it comes to aspects of formal representation in the universal sense. These complications may be summarized in two fundamental points as follows:

The first point concerns the optionality of the agentive PP in the passive sentence, a position which is still held by generative syntacticians of today (see, for example, Roberts, 1996, among others). The notion of optionality may have been motivated by the structural representation of the PP-complex in terms of what is known as 'Chomsky-adjunction' referred to earlier. That is, the P *by* is 'Chomsky-adjoined' to the left of the relevant NP simply because the insertion or deletion of the whole agentive

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[9] Notice that I am avoiding the misleading term 'pseudo-passive', a term used by Chomsky himself to describe sentences such (39) and (41) (see also note 8). Sentences such as these are in fact examples of the canonical passive construction, namely what may be provisionally called, the 'personalized' version of the impersonal passive, since the Agent is characterized by a human and indefinite nature but the nominal expletive *it* is not used to refer to it (cf. section 1.3).

PP does not affect the internal structure of the passive sentence, given the dependency of either process on the speaker's intentionality (cf. Akmajian and Heny, 1975, p.149). But this is an empirical statement not a logical one. Empirical statements are contingent: they may be true or false; whereas logical statements are necessary: they are necessarily true if true, and they are necessarily false if false. In English examples such as (42) below the agentive PP is neither optional nor obligatory, but rather it is necessarily deleted when deleted as in (42a) and it is necessarily inserted when inserted as in (42b).

(42) a. Trinity College was founded in 1592.
b. John Major was succeeded by Tony Blair.

Even in the case of the Arabic passive such a generalization cannot be seen as a paradox, notwithstanding the far more predominant agentless nature of such a construction than the English counterpart as mentioned above. This means that in the unmarked situation the agentive PP is necessarily deleted, and in the marked situation it is necessarily inserted. From now on the discussion will be confined to the agentless passive (i.e. the so-called 'short passive') in both languages. The input for this construction will be taken as (43a) for the Arabic VSO-order and (43b) for the English SVO-order where V is simply restricted to passivizable verbs and NP is the subject position in either language.

(43) a. Pass V NP (VSO-order)
b. NP Pass V (SVO-order)

The second point is that Pass-transformation in (38), like the previous one in (27), is incapable of providing the input for the so-called 'impersonal passive'. This is because it cannot insert the nominal expletive that acts as the subject in this construction, be it the implicit pronominal *huwa* 'he' in Arabic or the explicit pronominal *it* in English as discussed earlier (see the introduction). In fact, with this contrast, it would be extremely difficult to capture the fact that an impersonal passive with an expletive interpretation in Arabic such as (44a) below is usually rendered in English into what may provisionally be called the 'personalized' version of the impersonal passive as in (44b) (see also note 9).

(44) a. ni:ma fi: al-da:ri.
(Gloss: was slept (he) in the-house (Obl))
(Lit.: It was slept in the house.)
b. The house was slept in.

The intricate problem with Pass-transformation would, therefore, arise from its failure to provide the input for examples like (44a) on the one hand, and its claim to account for examples like (44b) on the other, since the latter belong to the class of such mistakenly christened examples as 'pseudo-passives' as in (39) and (41) (see also note 9). To resolve this apparent intricacy, examples such as (39), (41) and (44b) will be provisionally considered a sub-class of the personal passive as they all meet the structural condition shown in (43), whereas any example subjectivizing the nominal expletive such as (44a) will be an indication of the so-called 'impersonal passive'. The input for the latter type is illustrated in (45a) for Arabic and (45b) for English, where Exp is the nominal expletive and X is the V-complement which may be a PP-argument as in (46) or a *that*-argument as in (47).

(45) a. Pass V Exp X (VSO-order)
b. Exp Pass V X (SVO-order)

(46) a. si:ra ?̲ala: ha:t̲h̲ihi al-ard̲i.
(Gloss: was walked (he) on this the-land (Obl))
b. (Lit.: It was walked on this land.)

(47) a. qi:la anna zaydan nah̲awiyyun.
(Gloss: was said (he) that Zaid (Acc) syntactician (Nom))
b. It was said that Zaid was a syntactician.

The structural conditions shown in (43) and (45) above are therefore put forward as simplified representations of the two types of the canonical passive construction in Arabic and English (viz. the so-called 'personal passive' and the so-called 'impersonal passive') in order to facilitate further analyses of this construction in the upcoming sections. The criticism levelled at the TGG model (both within its rigorous and revised incarnations) has led research to entirely dispense with the assumption that the construction in question results from an application of the transformational rule Pass-transformation, though some of the deep insights put forward within this model are beyond dispute. The next section will consider how the early version of the P&P model treats the canonical passive construction in both languages and the problems that may proceed from this model.

1.3 Passivization in the P&P model (I)

As mentioned earlier, the lexicalist hypothesis was enunciated in the extended standard model to essentially constrain the capacity of the transformational apparatus, and therefore confine the processes inherent in the morphological component to the lexicon. This indicates that the set of elements generated by phrase-structure rules is no longer regarded as a string of not necessarily ordered morphemes, but rather a string of 'ready-for-work' lexical items, each of which plays a role in the syntactic component. This paradigmatic shift has been taken for granted within the early version of the P&P model, where the emphasis is placed on the study of general principles and the way they interact for the formation of syntactic constructions (cf. section 1.1).

More specifically, according to this approach, there exist no such rules as Pass-transformation to yield such constructions as the canonical passive. Rather, formation of this construction simply results from the interaction between a set of general principles which are said to reflect certain properties of the human mind. This means that typologically unrelated languages such as Arabic and English resemble one another in the application of these principles, and that if they do differ, as they clearly do, they differ only in fixing certain values for the set of parameters involved. The main principles that interact for canonical-passive formation are: Move-alpha, the Projection Principle, the theta-Criterion, the Case Filter, and the Empty Category Principle (ECP) (cf. section 1.1). Whereas the main parameters that mark cross-linguistic variation are: the word-order parameter and the Pass-parameter as represented in the structural conditions for the so-called personal and impersonal passives in (43) and (45) respectively. The former type will be considered first and its structural condition is repeated here in (48).

(48) a. Pass V NP (VSO-order)
b. NP Pass V (SVO-order)

Recall that the abstract structure in (13) represents the subject position in the Spec of IP (i.e. the [NP, IP] position) and the object position in the Spec of VP (i.e. the [NP, VP] position). These two representations would hold for any output, be it an active sentence (where both representations would be the input) or its canonical passive version (where the former representation would be the input). Given that the NP in (48) acts as the subject of the passive version in Arabic and English, it follows that this NP would occupy the [NP, IP] position in the abstract structure of (13). Accordingly, the structure of (48) is converted into (49) below, with (50) being concrete examples:

(49) a. [VP Pass V [IP NP]] (VSO-order)
b. [IP NP [VP Pass V]] (SVO-order)

(50) a. [VP *kusira* [IP *al-ba:bu*]]
b. [IP *the door* [VP *was broken*]]

Of the general principles just mentioned, Move-alpha seems to be the only principle that is characterized by a transformational nature, since it is said to transform a given derivation from one level of representation, viz. DS, to another level or levels, viz. SS, PF and LF. It is assumed therefore that NP-movement, the principal movement in canonical-passive formation, can take place only if such a movement is required in order to satisfy such principles. In fact, this assumption is no more than a conceptual outgrowth of the traditional TGG model, which specified movement as one of two functions of Pass-transformation, the other being addition, as we saw in the previous section. To illustrate how NP-movement takes place in (50), consider the mapping of Move-alpha from DS onto SS in (51) and (52) respectively:

(51) a. [VP *kusira* [IP *e* [NP *al-ba:b*]]]
b. [IP *e* [VP *was broken* [NP *the door*]]]

(52) a. [VP *kusira* [IP *al-ba:bu* [NP *t*]]]
b. [IP *the door* [VP *was broken* [NP *t*]]]

At the level of DS in (51), the empty element *e* is allocated in the [NP, IP] position (the subject) to be occupied by the NP in [NP, VP] position (the object) in the course of derivation. Allocation of *e* as such is said to be preconditioned by the extended Projection Principle to ensure that the output has a subject. Accordingly, *e* is non-theta-marked and the [NP, VP] position is theta-marked, for which reason the NP in the latter position (*al-ba:b* in (51a) and *the door* in (51b)) will move to the former, otherwise it will violate the theta-Criterion (cf. examples (15)). Then, at the level of SS in (52), Move-alpha regulates the movement of this NP, so as to get Case from I (the head of IP), whilst at the same time the trace *t* that it leaves behind is specified by the ECP. As a result, this NP is assigned Nominative Case which is morphologically realized in Arabic, but not in English (*al-ba:bu* in (52a) and *the door* in (52b)). Case-assignment is, therefore, licensed by the Case Filter because NP-movement proceeds from one argument position (A-position) to another (cf. also examples (16) and (17)).

The interaction between UG principles in this way is taken as the standard analysis of the canonical passive construction in the early version of the P&P model, an analysis which generally holds that the DS-object as in (51) moves to act as the SS-subject as in (52). According to this model (which will be referred to as the 'standard analysis' or the 'standard assumption' throughout), passive sentences such as the output of (52) are assumed to reflect two fundamental properties. These two properties are stated in (53) below, where the NP in [NP, IP] position carries the same theta-role which the active verb assigns to the NP in [NP, VP] position (cf. Chomsky, 1981, p.124).

(53) a. [NP, IP] does not receive a theta-role.
b. [NP, VP] does not receive Case within VP, for some choice of NP in VP.

Given the logical coincidence of the DS-object in (51) and the SS-subject in (52), the two fundamental properties in (53) are identified with 'theta-role absorption' and 'Case absorption' respectively, and are therefore attributed to the Pass element shown in (49). That is, the Pass element, when attached to V as in (50), is said to 'absorb' the dual ability of this V to assign a theta-role to the external argument at one end, and to assign Case to the internal argument at another (cf. Jaeggli, 1986; Chomsky, 1988a, pp.119f.; Baker *et al.*, 1989; Haegeman, 1993, pp.169f.). In order to see what either property would follow from, let us first consider the relationship between the sub-categorization grid and the theta-grid of V.

As discussed earlier, the sub-categorization grid of a given V is said to be regulated by the Projection Principle and the theta-grid of this V by the theta-Criterion. In the former grid, the number and type of complements that the V c-selects is determined and, in the latter grid, each of these complements as well as the subject is assigned its appropriate theta-role (cf. section 1.1). The complements that figure in the sub-categorization grid are known as 'internal arguments' and their theta-roles 'internal theta-roles', whereas the subject of the V (being the predicate) is known as the 'external argument' and its theta-role the 'external theta-role', since it does not figure in that grid (cf. Williams, 1980, 1981). Both the internal argument(s) and the external argument that a given predicate necessitates designate what is traditionally known as the 'argument structure' of the predicate, which is synonymous with the 'valency' of the verb in Tesnière's (1959) terminology referred to earlier (cf. section 1.1). Thus, the transitive verbs *kasara* in Arabic and *break* in English select the sub-categorization grid and the theta-grid illustrated in (54a) and (54b) respectively, the latter being the argument structure itself:

(54) a. *kasara/break* (tr.) [__ NP]
b. *kasara/break* (tr.) [Agent Patient]

In fact, extending the Projection Principle seems to have resulted from this very notion of 'argument structure' to account for the subject of a predicate on the one hand, and to maintain the one-to-one relationship between sub-categorization and theta-marking on the other. That is, the necessary insertion or deletion of a given argument correlates with the presence or absence of the theta-role that is assigned to that argument, otherwise the theta-Criterion will be violated. Because Case is assigned to a given argument in accordance with visibility conditions on NPs (cf. Chomsky, 1981, pp.170f.), Case-assignment must also be correlated with theta-marking, otherwise the Case Filter will also be violated. These seemingly logical consequences of the theta-Criterion and the Case Filter have led Chomsky and his followers to identify 'theta-role absorption' and 'Case absorption' as the two fundamental properties of the canonical passive construction stated in (53) above. Given that these two properties are ascribed to the Pass element specifically, the distinction between a transitive active verb as in (54) and its canonical passive form would be explained in terms of the distinction between their theta-grids and between the corresponding Case grids as shown in (55) and (56) respectively:

(55) a. *kasara/break* (tr.) [Agent Patient]
b. *kasara/break* (tr.) [Nom Acc]

(56) a. *kusira/was broken* [Patient]
b. *kusira/was broken* [Nom]

Concerning the first fundamental property in (53a), theta-role absorption is assumed to be a crucial function of the Pass element in that it 'absorbs' the external theta-role (i.e. the Agent in (55a), for instance) by being assigned this role, hence the theta-grid in (56a), and therefore the non-theta-marked empty element *e* in the [NP, IP] configuration in (51). This assumption is motivated by the nonassignment of the external theta-role to an argument in the sub-categorization grid of V, since only internal arguments figure in this grid as in (54a), meaning that the external theta-role is the only theta-role that can be 'absorbed' by (i.e. assigned to) the Pass element. Accordingly, the distinction between the external theta-role and the internal theta-role(s) is said to correlate with the distinction between 'absorbability' and 'non-absorbability', a correlation that would explain why active sentences where the implicit pronominal *huwa* 'he' in Arabic or the explicit pronominal *it* in English is incorporated as a non-human Agent as in (57) below can never be interpreted as a paraphrase of (58) with expletive representations:

(57) a. kasara al-ba:ba.
(Gloss: broke (3sm) the-door (Acc))
b. It broke the door.

(58) a. kusira al-ba:bu.
(Gloss: was broken (3sm) the-door (Nom))
b. The door was broken.

The impossibility of expletive interpretation in such a perspective would, therefore, be accounted for by assuming that the external theta-role in (58) is assigned to the Pass element in accordance with the standard analysis, whereas the same theta-role in (57) is assigned to the [NP, IP] position, since the Pass element is absent in this configuration. Pursuing the matter a little further, an important question would arise: How can a theta-role be assigned to the Pass element? At one end, the Pass element above all involves a bound morpheme as in Arabic or a complex of a bound and free morpheme as in English (see, also, section 1.4); and at another, theta-role assignability is typical of NPs (or any sorts of arguments standing proxy for them) and of some PPs. Given these two facts, to answer the question just posed would not be an easy task.

According to the standard analysis, theta-role absorption is simply defined as 'theta-role assignment to a bound morpheme', an obligatory process which is said to impose a lexical specification on the Pass element. As such, it must be stated in the lexicon as an idiosyncratic property of the canonical passive construction in general, and must therefore be projected as part of the mapping from DS as in (51) onto SS as in (52), so as to escape violation of the Projection Principle. On this basis, the Pass element can only be understood as an argument, perhaps an external argument, to also escape violation of the theta-Criterion (cf. section 1.1). This analysis is claimed to be compatible with the factual observation that external theta-role assignment is a decisive precondition for canonical passivization: ***Verbs which assign an external theta-role are passivizable; verbs which do not assign an external theta-role are not passivizable.***[10] Accordingly, both transitive and intransitive verbs can be captured so far as the whole process of canonical passivization is concerned (cf. Jaeggli, 1986, p.593). However, although it offers a much more reasonable account than all the rigid formulas put forward within the traditional approach, such a factual observation is in fact incompatible with the standard assumption that the external theta-role in the canonical passive construction is assigned to the Pass element. In order to demonstrate such incompatibility, it is necessary therefore to discuss the second fundamental property of this construction in greater detail, given the correlation between theta-marking and Case assignment as we saw above.

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[10] Unlike the rigorous formula which considered transitivity a decisive precondition for canonical passivization within the traditional approach (viz. ***transitive verbs require a direct object and are passivizable; intransitive verbs do not require a direct object and are not passivizable*** (cf. note 8)), this factual observation would explain the non-passivizability of idiomatic expressions such as (i) below in terms of inhibition of external theta-role absorption.

(i) a. LafaTha al-nafasa al-aki:ra.
(Gloss: uttered (3sm) the-breath (Acc) the-last (Acc))
(Lit.: He uttered the last breath.)
b. He breathed his last.

It follows that NP-movement, the principal movement in canonical passivization, is also inhibited in such idiomatic expressions, though other types of movement such as WH-movement is permitted. For example:

(ii) a. man lafaTha al-nafasa al-aki:ra.
(Lit.: Who uttered the last breath?)
b. Who breathed his last?

With respect to the second fundamental property in (53b), Case absorption is also assumed to be a crucial function of the Pass element, a function which seems to be analogous to theta-role absorption. That is, the Pass element 'absorbs' the objective Case (i.e. Accusative in (55b), for instance) by being assigned this Case, hence the Case grid in (56b), and therefore the non-Case-marked NP in the [NP, VP] configuration in (51). In fact the assertion that "[NP, VP] does not receive Case within VP" as stated in (53b) holds only for languages such as English, while it is not the case with languages such as Italian and Spanish where the NP in [NP, VP] position can be assigned Nominative Case (cf. Jaeggli, 1986, pp.593f., for further detail). The assertion that "[NP, VP] does not receive Accusative Case within VP" has therefore been implied, so as to maintain its generalizability across languages such as Arabic, if this turns out to be the case. For this reason, the correlation between Case absorption and theta-role absorption would simply mean that the Pass element absorbs Accusative Case because it also absorbs the external theta-role at DS. The DS-representation in (51) is repeated here in (59).

(59) a. [VP *kusira* [IP *e* [NP *al-ba:b*]]]
     b. [IP *e* [VP *was broken* [NP *the door*]]]

Given this generalized correlation, the NP in [NP, IP] position (i.e. the empty element *e* itself) is assigned no external theta-role, and the NP in [NP, VP] position (*al-ba:b* in (59a) and *the door* in (59b)) is assigned no Accusative Case. It follows that, because the canonical passive verb (*kusira* in (59a) and *was broken* in (59b)) is not an Accusative-Case assigner, the NP in the latter position must move to the former where it can be assigned Nominative Case, an exclusively legitimate type of movement which would render (59) grammatical at SS. The SS-representation in (52) is repeated here in (60).

(60) a. [VP *kusira* [IP *al-ba:bu* [NP *t*]]]
     b. [IP *the door* [VP *was broken* [NP *t*]]]

As discussed above, this type of movement is legitimate because it proceeds from one A-position (an argument-position) to another, the former being theta-marked and the latter non-theta-marked. Thus, the moved NP (*al-ba:bu* in (60a) and *the door* in (60b)) receives both Nominative Case from I (the head of IP) and the internal theta-role through the medium of its trace *t*, which is theta-marked. Both the moved NP and the trace *t* it leaves behind form a chain, [*al-ba:bu*, *t*] and [*the door*, *t*], where the head (*al-ba:bu* / *the door*) receives one Case and the foot (the trace *t*) receives one theta-role. Under this analysis, NP-movement is mainly triggered by Case Theory in that Nominative-Case assignment must occur, and therefore be licensed by the Case Filter in order to satisfy this Filter. As a precondition for SS, this NP-movement is in general obligatory in languages such as Arabic and English as is evident in (59) and (60), whereas the same NP-movement is optional in languages such as Italian and Spanish.[11]

It seems the case that Case absorption is simply interpreted as the exhaustion of the sole occurrence of Accusative-Case assignment: once the Accusative Case is absorbed by the Pass element, it is no longer assignable to an NP in [NP, VP] position. But this interpretation will certainly entail the following rigorous generalization: ***Verbs which assign Accusative Case are passivizable; verbs which do not assign Accusative Case are not passivizable***. Here, again, we are facing the same problem that the traditional approach is fraught with, and thus "identification of canonical passivization with Accusative-Case assignment" would be no more than an 'elegant' locution for re-expressing the misguided belief that transitivity is a decisive precondition for canonical passivization (see also notes 8 and 10). Suppose, for the moment, that this generalization is true in languages such as English, as Chomsky and his followers claim, it is certainly false in languages such as Arabic, which permit instantiation of the so-called impersonal passive with intransitive verbs. Let us now reintroduce the structural condition for this construction stated in (45) in section 1.2, and simplify its notations accordingly, as in (61) and (62) respectively.

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[11] A concrete example from Spanish may be useful here to illustrate this optionality of NP-movement. Consider the following SS-representation where the NP *la oveja* 'the sheep' occupies the [NP, VP] position (cf. Chomsky, 1988a, p.119).

(i) a. [IP *pro* [VP *ha sido devorada* [NP *la oveja*]]]
[IP *it* [VP *has been devoured* [NP *the sheep*]]]
b. The sheep has been devoured.

Due to a specific value of the *pro*-drop parameter in Spanish (or Italian), the NP *la oveja* 'the sheep' may move to the null-subject position *pro*, a value that is also fixed in Arabic but whose optionality is permitted under certain conditions, which are not to be discussed here. As a result, the moved NP and its trace *t* form the chain [*la oveja*, *t*] where the head receives Nominative Case and the foot the internal theta-role, thus yielding the other option in (ii):

(ii) a. [IP *la oveja* [VP *ha sido devorada* [NP *t*]]]
[IP *the sheep* [VP *has been devoured* [NP *t*]]]
b. The sheep has been devoured.

(61) a. Pass V Exp X (VSO-order)
b. Exp Pass V X (SVO-order)

(62) a. [VP Pass V [IP (Exp) [X]]]
b. [IP Exp [VP Pass V [X]]]

(where (Exp) in (62a) stands for the implicit nominal expletive *huwa* 'he' in Arabic, and Exp in (62b) for the explicit nominal expletive *it* in English. X in both structural conditions stands for the V-complement, which may be a PP-argument or a CP-argument as in Arabic, or just a CP-argument as in English). The PP-argument and the CP-argument will be discussed in turn.

As for the PP-argument, certain intransitive verbs in Arabic can be 'impersonally' passivized, thereby allowing an expletive interpretation of the subjectivized pronominal, an interpretation that cannot be instantiated in English for no apparent reason.[12] Consider the following examples of the so-called impersonal passive in (63a-65a) below, with (63b-65b) being their SS-representations in accord with the structural condition in (62a). Notice that the invariant pronominal *huwa* 'he' in the b-group is the implicit nominal expletive (Exp).

(63) a. si:ra ?ala: ha:thihi al-ardi.
b. [VP *si:ra* [IP (*huwa*) [PP *?ala: ha:thihi al-ardi*]]]
c. [VP *was walked* [IP (*he*) [PP *on this the-land*]]]
d. (Lit.: It was walked on this land.)

(64) a. ni:ma fi: ha:tha al-bayti.

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[12] However, this expletive interpretation is well permissible in languages such as Dutch, Finnish, German, Hindi, etc. within exactly the same configuration (cf. Perlmutter, 1978, pp.168f.; Siewierska, 1984, pp.101f.). To clarify the point, a concrete example from Dutch as in (i) and from German as in (ii) will suffice:

(i) a . Er wordt in deze kamer vaak geslapen.
(Gloss: it was in this room often slept)
b. (Lit.: It was often slept in this room.)

(ii) a. Es wurde in der Vorstadt getanzt.
(Gloss: it was in the suburbs danced)
b. (Lit.: It was danced in the suburbs.)

b. [VP *ni:ma* [IP (*huwa*) [PP *fi: ha:tha al-bayti*]]]
c. [VP *was slept* [IP (*he*) [PP *in this the-house*]]
d. (Lit.: It was slept in this house.)

(65) a. ruqisa fi: ha:tha al-masrahi.
b. [VP *ruqisa* [IP (*huwa*) [PP *fi: ha:tha al-masrahi*]]]
c. [VP *was danced* [IP (*he*) [PP *in this the-theatre*]]]
d. (Lit.: It was danced in this theatre.)

Now if one accepts the standard assumption that intransitive verbs are not Accusative-Case assigners, then the rigorous generalization mentioned above (a generalization which identifies canonical passivization with Accusative-Case assignment) would predict that intransitive verbs such as *sa:ra* 'to walk', *na:ma* 'to sleep', *raqasa* 'to dance', etc. in Arabic would systematically fail to passivize, which is absurd as the examples in (63-65) demonstrate. Plainly, there is no Accusative Case in the active versions of these examples to be absorbed by the Pass element, if one takes Case absorption for granted at all. Paradoxically, Chomsky and his followers would claim that, in languages which permit an expletive interpretation of the subjectivized pronominal as in (63-65) above (see also note 12), the passivizability of these intransitive verbs is attributed to their ability to assign 'structural' Case indirectly to the object of P,[13] though still inhibited from taking an internal theta-role.

If this contention were true of these languages only, then cross-linguistic variation between Arabic and English in these verbs would be explicable in terms of the polarity of structural-Case assignment versus non-structural-Case assignment, respectively, meaning that the English counterparts would never passivize. However, as is well known in Arabic linguistic theory (which was enunciated in the Middle Ages), structural-Case assignment in Arabic is restricted exclusively to two types of Accusative nominal when neither the direct object nor the indirect object exists in a core relationship with the main lexical verb. These are what is termed *al-maf?u:l al-mutlaq* 'the cognate object' and *al-maf?u:l fi:hi* 'the adverbial object', with the latter occurring as either *Tharf zama:n* 'an adverb of time' or *Tharf maka:n* 'an adverb of place' (cf. El-Marzouk, 1998b, pp.61f., for further detail). Accordingly, these two types of Accusative nominal can move to [NP, IP] position under canonical passivization for Nominative-Case assignment as in (66-68) below, thereby barring an expletive interpretation of the subjectivized pronominal, viz. the implicit pronominal (3sm).

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[13] Chomsky makes a distinction between what he calls 'structural' Cases and 'inherent' Cases. The former include Nominative and Accusative Cases which are assigned by I and V respectively at SS, whereas the latter comprise Genitive and Oblique Cases which are assigned by N/A and P respectively at DS. In accordance with uniformity conditions on Case assignment, 'inherent' Cases are said to be associated with theta-marking in that the head assigns inherent Case to the NP it theta-marks (cf. Chomsky, 1986a, p.193).

(66) a. *si:ra* [IP ***sayrun*** *t̲awi:lun*] **(Cognate Object)**
(Gloss: was walked (3sm) **walk** (Nom) long (Nom))
(Lit.: A long **walk** was walked.)
b. Someone walked long.

(67) a. *ni:ma* [IP ***yawmun*** *ka:milun*] (**Adverbial Object** (Time))
(Gloss: was slept (3sm) **day** (Nom) whole (Nom))
(Lit.: A whole **day** was slept.)
b. Someone slept a whole day.

(68) a. *ruqis̲a* [IP ***fawqu*** *al-minas̲s̲ati*] (**Adverbial Object** (Place))
(Gloss: was danced (3sm) **over** (Nom) the-platform (Gen))
(Lit.: **Over** the platform was danced.)
b. Someone danced over the platform.

Clearly, therefore, what we may provisionally call the 'personalized' version of the impersonal passive will be the result, since the abstractive dissociation of the implicit pronominal (3sm) from the external theta-role (the Agent) is still perceivable. That is, the Agent is understood to be strictly human and indefinite but the nominal expletive is not used implicitly to refer to it (cf. note 9). Now if the passivizability of intransitive verbs is determined by strictly local subcategorization, where the PP is subcategorized internally to VP as seen earlier (cf. section 1.2, examples (39–41)), then nothing would in principle prevent English intransitive verbs such as *walk, sleep, dance*, etc. from 'impersonal' passivization with an expletive interpretation of the subjectivized pronominal as in (63–65). In other words, if these English intransitive verbs were not able to assign structural Case under similar conditions, then they would never be able to instantiate the movement of the object of P to [NP, IP] position under canonical passivization, which is absurd as the following examples demonstrate.[14]

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[14] However, the mechanisms underlying this type of NP-movement in English constitute one of the unsolved problems in current linguistic thinking. Ian Roberts (personal communication) has pointed out that the presence of P, in this case, somehow imposes a transitive nature on the intransitive V, for which reason it is susceptible to canonical passivization. This means that the intransitive V and the P it requires are linked in a causative relation, a point that was already expressed in medieval Arabic linguistic theory (for more information,

(69) a. [IP *this land*] *was walked on*
b. [IP *this house*] *was slept in*
c. [IP *this theatre*] *was danced in*

Correspondingly, this type of NP-movement to [NP, IP] position also results in what may be called the 'personalized' version of impersonal passivization rather than what is misleadingly called 'pseudo-passivization' (see the introduction; see also notes 8 and 9). Therefore, the rigorous generalization which simply identifies canonical passivization with Accusative-Case assignment should be either abandoned or radically modified in the light of these existing facts, since it was already spelled out in one form or another within the traditional approach as referred to above. This is because an analysis of the PP-argument, which X in the structural condition of (62a) stands for, illustrates that certain intransitive verbs in Arabic can nonetheless passivize 'impersonally' with or without an expletive interpretation of the subjectivized pronominal as in (63–65) and (66–68). Even in the case of the English counterparts, passivization is also possible, particularly when the PP-argument is locally subcategorized as a V-complement as in (69).

With regard to the CP-argument, another alternative for X in the structural condition of (62), certain ditransitive verbs in Arabic can also be 'impersonally' passivized, thereby permitting an expletive interpreta-

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see El-Marzouk, 1998b, pp. 58f. and 83f.). Yet, it does not seem to explain the relation between (ia) and (ib) below, given the acceptability of the latter in Arabic.

(i) a. This land was walked on.
b. * It was walked on this land.

It may be the case that the causative relation being talked about reduces both the intransitive V *walk* and the P *on* to an inseparable transitive entity *walk-on*, which selects an argument structure in the same way transitive Vs like *break* do. If this is correct, then the difference between *walk-on* and *walk* would be explained in terms of the difference between their argument structures, viz. [Agent Patient] *vs.* [Agent Location], respectively. Accordingly, the relation between (ia-b) would only be detected in the SS-representations of their active versions as in (iia-b) below, where the NP in [NP, IP] position is an unspecified human subject, the NP *this land* in (iia) acts as the object, and the PP *on this land* in (iib) as the V-complement.

(ii) a. [IP NP [VP *walked-on* [NP *this land*]]]
b. [IP NP [VP *walked* [PP *on this land*]]]

Consequently, (iia) would be passivizable in English as in (ia), whereas (iib) would not be passivizale in English as in (ib) but passivizable in languages such as Arabic, Dutch, Finnish, German, Hindi, etc. (see also note 12).

tion of the subjectivized pronominal, an interpretation that can also be instantiated in English as will be seen presently. In Arabic linguistic theory, these ditransitive verbs comprise what is traditionally known as 'verbs of certainty' such as *?arafa* 'to know', *i?taqada* 'to believe', etc. and 'verbs of uncertainty' such as *Thanna* 'to assume', *qa:la* 'to say', etc. Typical of these ditransitive verbs is the semantic association of the two objects they take with a nominal sentence (i.e. a 'topic' and a 'comment'), a sentence which acts syntactically as the embedded CP-argument itself (see El-Marzouk, 1998b, pp.85f., for further detail). Consider the following 'impersonal' passives from Arabic as in (70a-72a) below, with the b-group being their SS-representations in accord with the structural condition of (62a), and the d-group being the SS-representations of the English counterparts in accord with the structural condition of (62b). Notice, again, that the invariant pronominal *huwa* 'he' in the b-group is the implicit expletive (Exp).

(70) a. ?urifa anna zaydan ka:tibun.
  b. [VP *?urifa* [IP (*huwa*) [CP *anna zaydan ka:tibun*]]]
  c. [VP *was known* [IP (*he*) [CP *that Zaid writer*]]]
  d. [IP *it* [VP *was known* [CP *that Zaid was a writer*]]]

(71) a. i?tuqida anna hindan jami:latun.
  b. [VP *i?tuqida* [IP (*huwa*) [CP *anna hindan jami:latun*]]]
  c. [VP *was believed* [IP (*he*) [CP *that Hind beautiful*]]]
  d. [IP *it* [VP *was believed* [CP *that Hind was beautiful*]]]

(72) a. Thunna anna al-falsafata tu?allimu al-hikmata.
  b. [VP *Thunna* [IP (*huwa*) [CP *anna al-falsafata tu?allimu al-hikmata*]]]
  c. [VP *was assumed* [IP (*he*) [CP *that the-philosophy teach the-wisdom*]]]
  d. [IP *it* [VP *was assumed* [CP *that philosophy taught wisdom*]]]

Here, the *anna*-argument in Arabic, whose English equivalent is the *that*-argument, is represented as the complementizer phrase CP, a single-bar projection of the embedded sentence S (cf. the abstract structure in (13)). In both languages, the whole CP-argument branches under the [NP, VP] configuration to act as the object of V. Accordingly, it should be treated as an NP assigned Accusative Case though not realized morphologically as in the case of bare nominals in Arabic, for instance. Given that this CP-argument does not require movement to [NP, IP] position under canonical passivization (except perhaps the case with some English verbs),[15] it should in principle retain the potential for Accusativeness, and therefore its abstractive dissociation from being 'absorbed' by the Pass element (if 'absorption' were true). This is in fact ascribable to the potential Nominativeness of the nominal expletive itself. Hence, the CP-argument represents its structural status within a configuration independent of the bare verb, whether it is passivized as in (70–72) above or activized with an unspecified human NP-subject as in (73–75) below.

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[15] Researchers like Williams (1979) observe that some verbs in English permit the movement of *that*-argument to [NP, IP] position as in (ia) below, whereas other verbs do not as in (ib) below (cited in Chomsky, 1981, p.149, n.121).

(i) a. [IP *that-argument* [VP *was believed*]]

(73) a. [VP *?arafa* [IP NP [CP *anna zaydan ka:tibun*]]]
b. [IP NP [VP *knew* [CP *that Zaid was a writer*]]]

(74) a. [VP *i?taqada* [IP NP[CP *anna hindan jami:latun*]]]
b. [IP NP [VP *believed* [CP *that Hind was beautiful*]]]

(75) a. [VP *Thanna* [IP NP [CP *anna al-falsafata tu?allimu al-hikmata*]]]
b. [IP NP [VP *assumed* [CP *that philosophy taught wisdom*]]]

In such a perspective, conservation of the potential Accusativeness of CP-argument (the *anna*-argument in Arabic and the *that*-argument in English) constitutes one of the hidden facts that stand in contrast with the standard assumption that the Pass element absorbs Accusative Case or, for that matter, the external theta-role. It is worth noting here that 'impersonal' passives with CP-arguments such as (70–72) exhibit more syntactic flexibility than 'impersonal' passives with PP-arguments. This can be attributed to the ditransitivity of V in the former type, where the subject of the CP-argument, the direct object of V, may move to [NP, IP] position, thereby replacing the nominal expletive itself. Even if this movement occurs in Arabic and English, it would not affect the potential Accusativeness of the CP-argument, since the empty pronominal PRO, which presupposes the existence of an implicit argument, is still controlled by this subject (cf. section 1.4, for further detail). Thus, the Accusativeness of PRO is 'transferred' onto the second internal argument (the residue of CP). While in Arabic this 'transfer' is realized morphologically as in (76a-78a) below, in English it is realized via the infinitivization of the predicate of CP as in (76b-78b).

(76) a. [VP *?urifa* [IP *zaydun* [PRO *ka:tiban*]]]

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b. *[IP *that-argument* [VP *was held/reasoned*]]

In medieval Arabic linguistic theory, the possibility of CP-movement within an identical configuration (where the *anna*-argument itself moves to [NP, IP] position) could be explained in terms of what is traditionally known as *taqdi:m wa ta'ki:r*, roughly 'fronting and backing' (cf. Owens, 1988, pp.305, 311) or 'antepositioning and postpositioning' (cf. Bohas *et al.*, 1990, pp.36, 39, 57).

b. [IP *Zaid* [VP *was known* [PRO *to be a writer*]]]

(77) a. [VP *iʔtuqidat* [IP *hindun* [PRO *jami:latan*]]]
b. [IP *Hind* [VP *was believed* [PRO *to be beautiful*]]]

(78) a. [VP *Thunnat* [IP *al-falsafatu* [PRO *tuʔallimu al-hikmata*]]]
b. [IP *philosophy* [VP *was assumed* [PRO *to teach wisdom*]]]

For virtually the same structural reasons, we are therefore forced to consider (76–78) the 'personalized' versions of the impersonal passives in (73–75), given that the potential Accusativeness of the CP-argument is still maintained.[16] Returning to the Arabic impersonal passives with PP-arguments in (63–65), the intransitive verbs in the SS-representations (the b-group) are said to assign structural Case to the object of P, assignment which would account for their susceptibility to canonical passivization. If this is indeed the case, then, like the CP-argument in (70–72), the PP-argument also represents its structural status within a configuration independent of the bare verb, since neither type of argument requires movement to [NP, IP] position due to the potential Nominativeness of the nominal expletive which normally acts as the subject. It follows that the potential for structural Case would not be affected either whether the bare verb is passivized as in (63–65) above or activized with an unspecified human NP-subject as in (79–81) below.

(79) a. [VP *sa:ra* [IP NP [PP *ʔala: ha:thihi al-ardi*]]]
b. [IP NP [VP *walked* [PP *on this land*]]]

(80) a. [VP *na:ma* [IP NP [PP *fi: ha:tha al-bayti*]]]
b. [IP NP [VP *slept* [PP *in this house*]]]

(81) a. [VP *raqasa* [IP NP [PP *fi: ha:tha al-masrahi*]]]

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[16] Notice that the Case structure of CP in (76-78) cannot be equated with one selected by transitive Vs such as *qarrara* in Arabic and *decide* in English. This is because such Vs are not ditransitive, and thus the 'transferred' Case from PRO to the residue of CP is Nominative, which is morphologically realized in Arabic as in (ia), but still infinitivized in English due the expletive interpretation as in (ib).

(i) a. [VP *qurrira* [PRO *al-thaha:bu*]
(Lit.: Going was decided.)
b. [IP *it* [VP *was decided* [PRO *to go*]]]

The interesting point here is that the Arabic passive in (ia) would be the 'personalized' version of the English impersonal passive in (ib), notwithstanding the idiosyncratic behaviour of the latter within an exceptionally marginal situation (cf. Chomsky, 1986a, pp.124, 211, n.63).

b. [IP NP [VP *danced* [PP *in this theatre*]]]

From the above analysis it can be seen that the Pass element is not an 'absorber' of Accusative Case at the DS-level of the canonical passive construction in general (cf. (59)), given the conservation of Case-assignment at the SS-level of the so-called impersonal passive type at least. Concerning the PP-argument, if it is true that the Case assigned to the object of P is structural, then this Case is still retained in the Arabic impersonal passives (63–65) due to the independent structural status of PP in these passives as well as their corresponding actives (79–81). Hence, the relation between the Arabic impersonal passives (63–65) and their English 'personalized' versions can be explained by reference to the 'personalized' versions of the former in (66–68), or even by reference to the SS-representations of the active counterparts of both (see also note 14). As for the CP-argument, the analysis has shown how the potential Accusativeness of this argument is retained more transparently both in the impersonal passives (70–72) and their 'personalized' versions (76–78) in the two languages by recourse to the active counterparts of both types as in (73–75).

Now if the Pass element is not an 'absorber' of Accusative Case as demonstrated, and if 'Case absorption' is correlated with 'theta-role absorption', then it follows that the Pass element is not an 'absorber' of the external theta-role either. The notion of absorption is based on the standard assumption that the Pass element is an argument which is base-generated under I (the head of IP) and outside the domain of VP, for which reason it is said to absorb (i.e. be assigned) the external theta-role to satisfy the theta-Criterion. Yet, the status of the Pass element as an argument conflicts with its status as base-generated under I, and thus the standard assumption is incompatible with the factual observation that external-theta-role assignment is a defining factor in canonical passivization. Conceptual defects such as these suggest that radical modifications of the standard assumption put forward within the early version of the P&P model should be in order. In the next section an alternative analysis of the canonical passive construction in Arabic and English will be introduced with some reference to the later version of the P&P model.

1.4 Passivization in the P&P model (II)

As mentioned earlier, the internal levels of DS and SS have been eliminated in the later version of the P&P model due to the redundancy of well-formedness evaluation at these levels on the one hand, and the greater viability of well-formedness evaluation at the external levels of PF and LF on the other. However, this does not mean that the principles which essentially apply at DS and SS are altogether dispensed with. Rather, the interaction between such principles for the formation of a given construction will be reflected in one form or another at PF and LF through the workings of a set of transformations (unitary and binary) similar in spirit to those of the traditional model of TGG. Given that Move-alpha is a subcase of unitary transformations, this general principle is said to be the direct mediator between the lexicon and the external levels of PF and LF (cf. section 1.1). It follows that the essential difference between the early and later versions of the P&P model can be detected in the manner in which units are selected from the lexicon. In the early version, such units are inserted in the phrase marker as lexical items without inflectional features (NPs with no Case, for example), whereas, in the later version, they are inserted as fully inflected lexical items whose features must be checked off in order to be spelled out by Spell-Out at PF. More specifically, the essential difference between the two versions is discernible in the sort of trigger for the operation of Move-alpha: NPs without inflectional features, for instance, move to get inflectional features (i.e. Case features) as we saw in the preceding section, while fully inflected NPs are now said to move to check off such features. For this reason, we have assumed that the principles which interact for canonical-passive formation synchronize their functioning with lexical insertion.

The notion of feature checking was in fact motivated by the factual observation that it is the functioning of the morphological component which, together with that of the phonological component, characteristically exhibits parametric variations between natural languages. This factual observation was resulted in the categorical expansion of inflectional features, which IP is responsible for (cf. the abstract structure in (13)), by splitting up the I-node into a number of functional categories such as Agrs, Tns, Agro, etc. (cf. the abstract structure in (18)). Because the Pass element is one such inflectional feature (an element which involves a bound morpheme as in Arabic or a complex of a bound and free morphemes as in English), it must therefore be categorically projected in a format similar to that of the X-bar Theory. This indicates that the Pass element cannot be inserted in the phrase maker as an argument to which Case and a theta-role are assigned as we saw in the preceding section, but rather projected as a functional category having its independent categorical status and passing through the projection cycle in the same way as any member of the IP-group does, a seemingly tenable breakthrough which originated with Fassi Fehri (1987, 1988).

The idea of inserting the Pass element as an argument (an idea that was adopted within the early version of the P&P model) led a number of generative syntacticians to consider this element a nominal category which is base-generated under I (the head of IP) along with inflectional features such as Tns and Agr. Thus, incorporation of the Pass element into V (the head of VP) is said to proceed from one of two types of covert movement under canonical passivization, viz. V-movement to I, or I-movement to V (cf. Baker *et al.*, 1989). Accordingly, the three designations of inflectional features (viz. Agr, Tns, and Pass) would be incorporated into V 'simultaneously', since they are all base-generated under I (the head of IP), as illustrated in the following abstract structure:

(82) [IP Spec [I' I-**Agr-Tns-Pass** [VP V NP]]]

However, this representation will clearly violate the principled difference between arguments and heads so far as the level of projection is concerned. At one extreme, to impose an argument status on the Pass element will certainly put this element on a par with maximal or phrasal projections (i.e. double-bar projections). At the other, to consider the Pass element a nominal category that is base-generated under I (which is after all the head of IP) will give this element a head status, and therefore a status of zero-bar projections. In both extremes, the distinction between zero-bar projections and double-bar projections will result in a seemingly unsolvable paradox. What is more, the representation in (82) is in fact, empirically speaking, incapable of deriving the fixed position of the Pass element in relation to Agr and Tns. In languages such as Arabic the Pass element requires a bound morpheme which is systematically infixed into the underlying lexical form of V, a property which differentiates this language typologically from languages such as English. For example:

(83) a. *kusira*
b. [*k-s-r-*] + [*-u-i-a*]
c. [breaking] + [Agr Tns Pass]

Here, the canonical passive verb *kusira* in (83a) consists of two bound morphemes as in (83b): first, the three-radical root *k-s-r-* which carries the main lexical information (the basic meaning of 'breaking'); and second, the formative morpheme *-u-i-a* which is responsible for all the inflectional features being talked about, viz. Agr, Tns, and Pass (a seemingly logical consequence of the root system that is typical of Semitic languages in general). Given that the formative morpheme is systematically infixed into the three-radical root, incorporation will therefore establish an **internal** position for the Pass element in relation to Agr and Tns, even though the whole IP is located outside the domain of VP as in (82). In languages such as English, on the other hand, the Pass element necessitates a complex of a bound and free morphemes, the former being systematically suffixed to the underlying lexical form of V, as illustrated in (84) below, the English counterpart of (83).

(84) a. *was broken*
     b. [*be*] + [*break*] + [*-en*]
     c. [Agr Tns] + [breaking] + [Pass]

Here, the canonical passive verb *was broken* in (84a) consists of three morphemes as in (84b): first, the free morpheme *be* which is only responsible for Agr and Tns; second, the underlying lexical form of V *break* which can be equated with the three-radical root *k-s-r-* in (83b); and third, the bound morpheme *-en* (*-n* in this case) which is the Pass element itself. Since the Pass element is systematically suffixed to the underlying lexical form of V, incorporation will in this case establish more conspicuously an **external** position for the Pass element in relation to Agr and Tns, notwithstanding the location of the whole IP outside the domain of VP in the phrase marker.

Now if the abstract structure represented in (82) above is incapable of deriving the fixed position of the Pass element in relation to Agr and Tns, as demonstrated, then it is equally incapable of accounting for the typological divergence between natural languages in the morphological structure of the Pass element itself. This conceptual defect also indicates that an alternative analysis of the canonical passive construction is inevitable. To avoid possible confusion, let us call the Pass element which requires a single bound morpheme as in Arabic '**1-morph Pass**', and the Pass element which necessitates a complex of a bound and free morphemes as in English '**2-morph Pass**'. This terminology will, therefore, help to explain the typological divergence being talked about in terms of parametric variation, as will be seen presently.

In a quite comprehensive analysis, researchers like Ouhalla attempt to explain the major properties of the canonical passive construction in general, an explanation that seems to have resulted from the particular focus of attention on the morphological component within the later version of the P&P model. Drawing on Fassi Fehri's (1987, 1988) original observation referred to above, Ouhalla's analysis attributes to the Pass element the status of an independent functional category, a category which heads its own maximal or phrasal projection (call it PassP) and intervenes between VP and the other elements of IP, viz. Agr and Tns (cf. Ouhalla, 1991, p.94). Because Agr and Tns are elements of the inflectional system of V like the Pass element itself, they must also be considered independent functional categories which head their own maximal or phrasal projections (call them AgrP and TnsP) in order to be at the same level of projection as PassP, thus steering clear of the unsolvable paradox that would arise from the abstract structure in (82).

Under this analysis, an apparently simple formula of the form 'Pass c-selects VP' has initially been introduced to capture the most prominent property of the canonical passive construction that is generalizable across languages, whether they employ the 1-morph Pass as in Arabic or the 2-morph Pass as in English. This formula clearly states that the c-selection of VP constitutes such a generalizable property, since the Pass element in any language instantiating the canonical passive construction (i.e. its verbal representation) tends to be systematically attached to V, not any other lexical category.[17] Accordingly, the general order of the three main functional categories (Agr, Tns, and Pass) will essentially be the same (though not necessarily invariant) when each category heads it own maximal projection, as illustrated in the abstract structure in (85) below. Notice that the single-bar projection of each category is disregarded here for the purposes of technical simplification.

(85) [AgrP Agr [TnsP Tns [PassP Pass [VP V NP]]]]

Proceeding from right to left, the configuration where VP is immediately dominated by PassP would account for the generalizable property of the canonical passive construction that the Pass morpheme is attached to V. Thus, as an initial step in the derivation of this construction, both Arabic (1-morph Pass) and English (2-morph Pass) will converge in the application of V-movement to Pass (rather than V-movement to I or I-movement to V as has been misleadingly believed (cf. the abstract structure in (82)). As a result of V-movement to Pass, a new complex will be derived (call it the [V+Pass] complex) which simply indicates that the Pass morpheme is attached to V. At this point, before any other type of movement is applied in the course of derivation, the derived [V+Pass] complex alone would mark the beginning of typological divergence between Arabic and English in that the 1-morph Pass element is incorporated in the former language (e.g. *u-i-a-* in (83b)) but only one part of the 2-morph Pass element is incorporated in the latter (e.g. *-en* in (84b)). This leads to the identification of the derived [V+Pass] complex in terms of an independent parameter (call it the [V+Pass] parameter) which has two different values as shown in (86).

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[17] This indicates that types of the non-canonical passive construction such as the so-called nominal or gerundive passive are to be treated by a formula different from 'Pass c-selects VP' since the Pass element itself is invisible in these types though the same pragmatic properties of the canonical passive construction are perceivable. A concrete example of the nominal passive from Arabic and English will suffice.

(i) a. Tarjamatu al-kita:bi....
(Gloss: translation (Nom) the-book (Gen)...)
b. The translation of the book....

Here, the derived nominal, *tarjamatu* in Arabic and *translation* in English, would select the same argument structure of the canonical passive verb, *turjima* in the former language and *was translated* in the latter, viz. [Patient], a matter that is beyond the scope of this study. Yet, the invisibility of the Pass element in nominal passives like (i) as well as the incorporation of the same pragmatic properties of the canonical passive construction is another empirical evidence that the Pass element is assigned neither Case nor a theta-role. This also holds for the gerundive passive with the derived gerundive *translating*, which is possible in English but not Arabic.

(86) a. [V+Pass] marks verbalization [+V].
b. [V+Pass] marks nominalization [+N].

Clearly, therefore, in the initial step of derivation, the value of the [V+Pass] parameter in (86a) will be fixed in languages such as Arabic, whereas the value of the same parameter in (86b) will be set in languages such as English. These two values can also account for further typological divergence between Arabic and English in the next step of derivation. Returning to the abstract structure in (85), it is the derived [V+Pass] complex of the value (86a) rather than (86b) which can move to Tns in order to satisfy the morphological-selectional properties of Tns, properties which dictate that Tns m-selects verbal categories in general. Then , the resultant complex can move further to Agr in (85) since the incorporation of Tns in languages such as Arabic means the 'bi-incorporation' of Tns and Agr as in (83) or even perhaps the 'multi-incorporation' of Tns, Agr, and other inflectional features.[18] Consequently, the resultant complex can now be spelled out by Spell-Out at the PF level, given that all the inflectional requirements of the 1-morph passive verb are satisfied at this level.

Concerning the derived [V+Pass] complex of the value (86b), on the other hand, this complex cannot move further to Tns in (85) because of its nominal nature, otherwise the morphological-selectional properties of Tns will be violated. Instead, the Aux *be* as in (84) will be m-selected from the lexicon to act as an instrumental unit, and will therefore be inserted under Tns due to its verbal nature. The insertion of the Aux *be* will, then, give rise to a new derived complex [be+V+Pass] which marks verbalization in the same way the derived [V+Pass] complex of the value (86a) does. Given that the new derived complex [be+V+ Pass] satisfies the m-selectional properties of Tns, it can move further to Agr in (85) but the incorporation of Tns in languages such as English does not necessarily mean the 'bi-incorporation' of Tns and Agr as in (84). In consequence, the resultant complex can now surface at the PF level through Spell-Out because all the inflectional requirements of the 2-morph passive verb are satisfied at this level.

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[18] It is argued that in languages such as Arabic Tns is also associated with Asp(ect) in the sense that the distinction between Past and Present would essentially be the distinction between Perfective and Imperfective respectively (cf. Fassi Fehri, 1988, for example). Thus, languages such as Greek, Polish, Russian, etc. would instantiate basically the same parameter. In languages such as English, on the other hand, Asp is marked by a different morphological complex [have+V+Asp], and therefore a different parameter is involved, which may extend to French, Italian, Spanish, etc.

In such a perspective, the typological divergence between Arabic and English in the canonical passive construction can be reduced to the two different values of the [V+Pass] parameter in (86a-b). If the derived [V+Pass] complex is verbal as in Arabic (value (86a)), then this complex moves to Tns and further to Agr in order to surface at PF under well-formedness conditions. If, however, the derived [V+Pass] complex is nominal as in English (value (86b)), then this complex remains in Pass and the Aux *be* is inserted under Tns, thereby creating a new derived complex [be+V+Pass] which subsequently moves to Agr, so as to surface at PF under the same conditions. In both cases, the purpose of movement to Agr is to match the form of the derived passive verb, be it 1-morph or 2-morph, with the NP-subject. Recall that the NP-subject occupies the Spec of IP (i.e. the [NP, IP] position) before splitting up the I-node into AgrP, TnsP, and PassP. This indicates that the NP-subject after splitting up the I-node will occupy the Spec of AgrP (i.e. the [NP, AgrP] position) as illustrated in (87) below, which is an extended version of (85). Notice that (87) is still a simplified version of (18), where AgrP is split up into AgrsP and AgroP, which are irrelevant here.

(87) [AgrP Spec [Agr' Agr [TnsP Spec [Tns' Tns [PassP Spec [Pass' Pass [VP Spec [V' V [NP]]]]]]]]]

Proceeding from right to left, again, NP is the object of V, which is an Accusative-Case position; the Spec of VP is the non-Case position of the subject that is assigned the external theta-role (call it the **E-subject**); and the Spec of AgrP is the Nominative-Case position of the subject that may be assigned an internal theta-role (call it the **I-subject**). Given the typological divergence between Arabic and English in the inflectional features of the canonical passive construction, it appears that the distinction between the E-subject and the I-subject is crucial for scrutinizing the typological convergence in the structural aspects of this construction. As an alternative to the two properties of the Pass category discussed in the preceding section (cf. (53)), let us assume that the presence of this category in the abstract structure in (87) brings about two essential properties as illustrated in (88). These two properties will be discussed in turn.

(88) a. The E-subject does not move to [Spec, AgrP] position to become the I-subject.
     b. The NP-object may or may not move to [Spec, AgrP] position to become the I-subject.[19]

Concerning the first essential property in (88a), it is absolutely imperative that the E-subject be realized as an empty category in order to meet the well-formedness conditions referred to above. This is due to the fact that if the E-subject is realized as a lexical category, then these conditions will not be met at the PF level. As such, the lexicalized E-subject will remain in its base-position, the Spec of VP in (87), which is a non-Case position, as we have just seen, meaning that Case requirement will be violated. On this account, the occurrence of a lexicalized E-subject, and therefore Case-requirement violation, will invariably result in ill-formed passives as shown in (89) below, where *al-walad* in (89a) and *the boy* in (89b) are the E-subjects themselves. Notice that the symbol (Ø) in the gloss indicates that the NP in question is deprived of Case.

(89) a. *[VP *kusira* [AgrP *al-ba:bu* [*al-walad*]]]
     (Gloss: was broken (3sm) the-door (Nom) the-boy (Ø))
     b. *[AgrP *the door* [VP *was broken* [*the boy*]]]

Lexicalization of the E-subject in such a configuration follows from the fact that the underlying lexical form of V (*k-s-r-* and *break*) moves to Pass (*-u-i-a* and *-en*) in order to generate the derived [V+Pass] complex (*kusira* in (89a) and *broken* in (89b)) in the initial step of derivation, prior to the functioning of Tns and Agr, as discussed above. The only way to evade the ill-formedness of passives such as (89) is the application of an instrumental process which necessarily deletes the E-subjects *al-walad* in (89a) and *the boy* in (89b) altogether, or necessarily inserts the P *by* as an adjunct to the latter, so as to get Oblique Case for the feature-checking process. As a consequence, the ill-formedness of canonical passives such as (89) is explicable in terms of the more reasonable assumption that the Pass category simply inhibits the movement of the E-subject to [Spec, AgrP] position as stated in (88a) than the standard assumption which attributes theta-role absorption and Case absorption to Pass, as we saw in the preceding section.

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[19] Notice that the distinction between the E-subject and the I-subject is similar to Ouhalla's distinction between thematic and structural subjects respectively (cf. Ouhalla, 1991, p.96). Yet, the two essential properties stated in (88) presuppose the necessary synchronization of the workings of the general principles that underlie canonical-passive formation (cf. section 1.3) with lexical selection in order to meet well-formedness conditions at PF through Spell-Out.

From this standpoint, the ill-formedness that results from realizing the E-subject as a lexical category makes it absolutely imperative to consider this E-subject an empty category simply because the inhibition of its movement to [Spec, AgrP] position will not affect the internal structure of the canonical passive construction. The only empty categories that do not proceed from the application of Move-alpha are *pro* and PRO, the former being marked in a Case position [-anaphor, +pronominal] and the latter in a non-Case position [+anaphor, +pronominal].[20] Given that the [Spec, VP] position in (87) is generated in a non-Case position, it follows that the E-subject, which originates in this position, must be realized as the empty category PRO rather than *pro*. Accordingly, PRO is perceived to be the implicit argument itself in that if the P *by* is necessarily inserted as an adjunct to the E-subject *the boy* in (89b) above, this E-subject can no longer be considered the external argument of V. Rather, both PRO and the derived PP complex will share the external theta-role of this V. This leads to the identification of PRO with the implicit controller when the PP complex is necessarily deleted and an infinitival clause is inserted instead. For example:

(90) a. [VP *hudima* [AgrP *al-jisru* [PRO *li-bina:?i al-saddi*]]]
(Gloss: was destroyed (3sm) the-bridge (Nom) for-building (Obl) the-dam (Gen))
b. [AgrP *the bridge* [VP *was destroyed* [PRO *to build the dam*]]]

Here, the implicit argument can be interpreted arbitrarily as a non-anaphoric pronominal such as *aẖaduhum* 'someone', *hum* 'they', etc. The fact that it refers to both *al-ha:dim* 'the destroyer' and *al-ba:ni:* 'the builder' in examples such as (90) may impose a syntactically 'active' nature on its implicitness, which enters into some sort of grammatical relation, even though it is not structurally represented in an A-position (an argument-position). The question arises as to which structurally represented category is to control PRO in examples such as (90). According to the standard assumption, it is the Pass morpheme which would be the legitimate controller of PRO, since this morpheme, being structurally represented, is said to absorb (i.e. be assigned) the external theta-role of V. However, this will certainly violate control relations between A-positions simply because Pass cannot act as an argument, as we saw in the previous section. Given that the E-subject is structurally represented in an A-position as [Spec, VP] in (87), it must therefore be the only legitimate controller of PRO to escape violation of control relations.

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[20] Notice that traces such as NP-traces and WH-traces are also empty categories, but are co-indexed with their antecedents as a result of Move-alpha applications, namely, the movement of the NP-object in the canonical passive construction (cf. section 1.1, examples (17); section 1.3, examples (51-52)) and the movement of WH-phrases which are not to be dealt with in the present study.

It now becomes evident that identification of the E-subject with the implicit controller of PRO will naturally account for the arbitrary interpretation of the implicit argument in the sense just discussed, even if the infinitival clause as shown in (90) is not embedded in the matrix clause. In this case, what is known as the 'agentless' or 'short' passive, the principal concern of the current study, will be the resultant construction, where the implicit argument being talked about refers exclusively to *al-ha:dim* 'the destroyer' as illustrated in (91) below. Therefore, the arbitrary interpretation of the implicit argument follows from the absence of the referential controller of PRO (being the implicit argument itself) in the traditional sense of arbitrary control relations as shown in (92) below.

(91) a. [VP *hudima* [AgrP *al-jisru* [PRO]]]
(Gloss: was destroyed (3sm) the-bridge (Nom)))
b. [AgrP *the bridge* [VP *was destroyed* [PRO]]]

(92) a. *sahlun* [PRO *hadmu al-jisri*]
(Gloss: easy (Nom) destruction (Nom) the-bridge (Gen))
b. *It is easy* [PRO *to destroy the bridge*]

With regard to the second essential property stated in (88b) above, the question arises as to whether or not the NP-object may move to [Spec, AgrP] position in order to act as the I-subject. In fact, the second essential property eliminates the possibility of misunderstanding the logical consequences of the first essential property stated in (88a). That is, the assumption that the Pass morpheme inhibits the movement of the E-subject to [Spec, AgrP] position does not necessarily mean that the NP-object should obligatorily move to the same position. For this reason, two possible syntactic configurations are clearly articulated in the second essential property: first, where the NP-object may move to [Spec, AgrP] position; and second, where the NP-object may not move to the same position. These two syntactic configurations will be considered in turn.

As for the first possible syntactic configuration, it plainly permits the actual movement of the NP-object to [Spec, AgrP] position, in which case *all* natural examples of the so-called personal passive will be generated, as cited throughout. Yet the notion of 'NP-object' (direct or indirect) needs to be reconsidered a little further and extended to those substantives that stand proxy for it in the case of its absence (i.e. the Accusative nominals that have the potential for I-subject promotion under canonical passivization). These substantives include the cognate object and the adverbial object (time/place) in Arabic (cf. section 1.3, examples (66–68)), and the object of the P which is causatively linked to V in English (see also note 14). The movement of these substantives to [Spec, AgrP] position results in deriving what we provisionally called the 'personalized' version of the impersonal passive within the same syntactic configuration, as discussed in the preceding section. For convenience, the Arabic examples (66–68) and the English examples (69) are repeated in (93) and (94) respectively:

(93) a. [VP *si:ra* [AgrP ***sayrun*** *ṯawilun*] (**Cognate Object**)
(Lit.: A long **walk** was walked.)
b. [VP *ni:ma* [AgrP ***yawmun*** *ka:milun*] (**Adverbial Object** (Time))
(Lit.: A whole **day** was slept.)
c. [VP *ruqis̱a* [AgrP ***fawqu*** *al-minas̱s̱ati*] (**Adverbial Object** (Place))
(Lit.: **Over** the platform was danced.)

(94) a. [AgrP *this land* [VP *was walked on*]
b. [AgrP *this house* [VP *was slept in*]
c. [AgrP *this theatre* [VP *was danced in*]

This clearly indicates that all natural examples of the canonical passive construction which actually involve NP-movement to [Spec, AgrP] position in Arabic and English can be classified under the first syntactic configuration of the second essential property stated in (88b). In such a perspective, the moved NP may be an object (direct or indirect) or a substantive which stands proxy for it as in (93) and (94), a configuration that can also be generalized over marginally exceptional situations where English verbs such as *believe* may instantiate the movement of the embedded *that*-argument (CP-movement) to the same position (see note 15). In order to generalize the first syntactic configuration even further, let us call the categories that do in fact move to [Spec, AgrP] position '**dynamic categories**' and contrast them with '**static categories**', categories which do not move to this position, as will be seen soon.

The mechanism underlying movement in the case of 'dynamic categories' may be explained in terms of co-indexation of a functional representation with a lexical one in the sense that the Pass category is co-indexed with the dynamic category (cf. Borer, 1986; Kayne, 1987; Tsimpli, 1989; Ouhalla, 1991, p.100). Thus, for the derivation of any natural example of the canonical passive construction which involves movement, the co-indexation mechanism implies that the dynamic category moves to [Spec, AgrP] position through the [Spec, PassP] position, but not any other position in the abstract structure in (87). To illustrate the co-indexation mechanism in structural terms, this abstract structure is repeated in (95) below, with the NP-object in (87) being replaced by the dynamic category (DC), which has the same index *i* as the [Spec, Pass] category itself.

(95) [AgrP Spec [Agr' Agr [TnsP Spec [Tns' Tns [PassP Spec$_i$ [Pass' Pass [VP Spec [V' V [DC$_i$]]]]]]]]]

As for the second possible syntactic configuration stated in (88b) above, on the other hand, it does not permit the actual movement of the NP-object from its base-position to [Spec, AgrP] position, in which case *all* natural examples of the so-called impersonal passive construction incorporating transitive verbs specifically will be generated. However, this syntactic configuration only applies to languages such as Irish, Ukrainian, Welsh, and the like, where the direct object under 'impersonal' passivization remains in its base-position and the nominal expletive is inserted in the [Spec, AgrP] position.[21] Accordingly, the term 'NP-object' in these languages should be sub-classified under what we have called 'static categories', categories which behave syntactically within the same configuration, where the inhibition of their movement to [Spec, AgrP] position is the immediate trigger for the insertion of the nominal expletive in this position. These categories include the PP-argument which acts as the V-complement in Arabic (see note 12), and the embedded CP-argument both in Arabic and English, notwithstanding the marginally exceptional case with English verbs such as *believe* (see also note 15). For convenience, examples (63-65) and (70) are repeated in (96) and (97) respectively:

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[21] In these languages, certain transitive verbs may undergo 'impersonal' passivization with the result that the direct object is still assigned Accusative Case and the inserted nominal expletive is assigned Nominative Case. A concrete example from Ukrainian as in (i) and from Welsh as in (ii) will suffice (cited in Baker, 1988; Baker *et al.*, 1989; Ouhalla, 1991, p.97).

(i) a. Cerkv-u bulo zbudova-n-o v 1640 roc'i.
(Gloss: church (Acc) was (Exp) was built in 1640)
(Lit.: The church it was built in 1640.)
b. The church was built in 1640.

(ii) a. Lladdwyd dyn.
(Gloss: was killed (Exp) man (Acc))
(Lit.: It was killed a man.)
b. A man was killed.

(96) a. [VP *si:ra* [AgrP (Exp) [PP *?ala: ha:thihi al-ardi*]]]
(Lit.: It was walked on this land.)
b. [VP *ni:ma* [AgrP (Exp) [PP *fi: ha:tha: al-bayti*]]]
(Lit.: It was slept in this house.)
c. [VP *ruqisa* [AgrP (Exp) [PP *fi: ha:tha al-masrahi*]]]
(Lit.: It was danced in this theatre.)

(97) a. [VP *?urifa* [AgrP (Exp) [CP *anna zaydan ka:tibun*]]]
b. [VP *was known* [AgrP (he) [CP *that Zaid writer*]]]
c. [AgrP *it* [VP *was known* [CP *that Zaid was a writer*]]]
(cf. also examples (71) and (72))

Likewise, the inhibition of movement to [Spec, AgrP] position indicates that all natural examples of the canonical passive construction incorporating static categories are classifiable under the second possible syntactic configuration of the second essential property stated in (88b). The static category may be an NP-object (see note 21), a PP-argument as in (96), or a CP-argument as in (97), a configuration that can also be generalized over the embedded infinitival clause which idiosyncratic verbs such as *decide* in English instantiate with an expletive interpretation (see also note 16). Thus, unlike the case with the dynamic category, the static category cannot be co-indexed with the [Spec, Pass] category simply because movement to [Spec, AgrP] position is inhibited. To illustrate movement inhibition in structural terms, the abstract structure in (95) above is repeated in (98) below, with the DC-position being occupied by the static category (SC), and the [Spec, AgrP] position by the nominal expletive (Exp).

(98) [AgrP Exp [Agr' Agr [TnsP Spec [Tns' Tns [PassP Spec [Pass' Pass [VP Spec V' V [SC]]]]]]]]]

Finally, within the alternative analysis of the canonical passive construction put forward in this section, the Pass element is not an argument absorbing Case and a theta-role, but a functional category having its own categorical status along with other inflectional elements such as Agr and Tns. Hence, the typological divergence between 1-morph Pass as in Arabic and 2-morph Pass as in English can be reduced to the two different values (verbal and nominal) of the [V+Pass] parameter in (86). The typological convergence, on the other hand, can also be detected in the general structure in (87), a structure that reflects the distinction between the E-subject and the I-subject. From the two essential properties of the canonical passive construction stated in (88), it can be seen that what all natural examples of this construction have in common, both intra-linguistically and cross-linguistically, is in fact the first essential property in (88a) which illustrates that the presence of the Pass element prevents the E-subject from moving to [Spec, AgrP] position. This means that the I-subject can never be the E-subject, for which reason the latter must be realized as the empty category PRO in its base-position, the [Spec, VP] position. The realization of the E-subject as the empty category PRO rather than *pro* is in effect a logical consequence of generating the former (but not the latter) in a non-Case position (cf. examples (89)).

Given the conceptual compatibility between this logical consequence and the factual observation that external-theta-role assignment is a decisive factor in the derivation of canonical passivization, the question arises as to whether or not passivizable verbs permit the movement of the NP-object to [Spec, AgrP] position to become the I-subject as stated in the second essential property in (88b). This question has led us to reconsider and extend the notion of 'NP-object' to include all categories which may move to [Spec, Agr] position (hence the term 'dynamic categories') and all categories which may not move to the same position (hence the term 'static categories'), a seemingly reasonable rectification of the mistaken belief that Accusative-Case assignment is a decisive factor in the derivation of canonical passivization. Indeed, with this distinction in mind, we can dispense with all the misleading terms that have been used in the literature to describe different types of the canonical passive construction. We can now safely say that there exist just two types of this construction, not only in Arabic and English, but also in any languages instantiating the same construction: dynamic passives and static passives. These two types are defined in (99) below, a definition which is a reformulation of the two properties stated in (88) above.

(99) a. In both the ***dynamic passive*** and the ***static passive***, the E-subject does not move to [Spec, AgrP] position to become the I-subject.
  b. In the ***dynamic passive***, DC is coindexed with [Spec, Pass], and therefore moves to [Spec, AgrP] position to become the I-subject (cf. the structure in (91)).
  c. In the ***static passive***, SC is not coindexed with [Spec, Pass], and therefore does not move to [Spec, AgrP] position to become the I-subject (cf. the structure in (94)).

2 Practice

Having discussed the main principles and parameters which underlie canonical-passive formation in Arabic and English in part 1, this part will draw on the potential frequency differences between the two languages in the same construction. Given the universal distinction between the dynamic and static passive types, the frequency differences will thus be examined within a particular approach to functional convergence and divergence from all possible angles. Essentially, this is to arrive at generalizable statements about the manner in which either type in Arabic functions in English and vice versa. It will also touch on the essential practical implications of the particular approach adopted to these differences from the viewpoint of linguistic-input ordering. Given the inherent typological and functional convergence/divergence between the two languages in the dynamic and static passive types, linguistic-input ordering will thus be considered with reference to the intrinsic (derivational) and extrinsic (functional) dimensions of either type. This is to examine some of the insights into the natural order of the canonical passive in L1 learnability, and to suggest a logical order of this construction in L2 teachablility, with the latter addressing both the Arabic-speaking learner of English and the English-speaking learner of Arabic.

Section 2.1 will offer some introductory remarks to define the two sorts of knowledge internalized by the native speaker in respect of the canonical passive, and to show how such knowledge has bearing on the functional aspects of this construction. Then, the approach to the potential frequency differences will be identified by using five paradigms (A, B, C, D, and E), with paradigms A and B illustrating the frequency counts of canonical passives in a given text in Arabic and its English version. Hence, the section will discuss the frequency asymmetry of these canonical passives within all possible directions, the subject-matters of the three remaining paradigms (C, D, and E). Section 2.2 will reintroduce the two sorts of internalized knowledge of the canonical passive to explain its symmetrical balance in the Arabic and English speakers in terms of the frequency paradigms discussed in section 2.1. Given the inevitable interaction between L1 knowledge and L2 knowledge, the practical implications of these paradigms will be identified with L1 learnability and L2 teachability, the concerns of sections 2.3 and 2.4 respectively. Thus, reference will be made to linguistic-input ordering for either context in the light of the two dimensions of the canonical passive (intrinsic and extrinsic). Section 2.3 will draw on some of the empirical research into the learnablility of the canonical passive in the L1. With some introductory remarks on the natural order of L1 acquisition, the section will consider two conflicting innatist hypotheses, the **continuity hypothesis** and the **maturation hypothesis**, as well as their accounts of the natural order of this construction in relation to the two kinds of linguistic-input ordering (intrinsic and extrinsic). Section 2.4, the final section, will offer some of the insights into L2 acquisition and consider the teachability of the canonical passive in the L2 with reference to the two dimensions just mentioned. This is to suggest a logical order of this construction by focusing on the cross-linguistic similarities between L1 and L2 in either dimension, and by having recourse to the frequency paradigms discussed earlier. The section will conclude with some notes on the role of the language teacher in utilizing the learner's L1 knowledge as a facilitating factor in L2 learning, regardless of the approach adopted to L2 teaching. To avoid all sorts of confusion and misunderstanding, we will sometimes be forced to repeat the same statement on more than one occasion.

2.1 Frequency asymmetry

Generally speaking, apart from the word-order variation between Arabic and English (VSO *vs.* SVO, respectively), the morphological properties of the canonical passive mark the typological divergence between these two languages, whereas the pragmatic connotations of the same construction are responsible for the typological convergence. In part 1, this typological convergence was examined in terms of a set of universal principles and the manner in which they interact for canonical-passive formation, provided that the typological divergence was reduced to the two different values of the [V+Pass] parameter (verbalization in Arabic *vs.* nominalization in English) (cf. item (86)). Furthermore, the interaction of this set of universal principles, whose functioning is assumed to synchronize with lexical selection, was taken to reflect two essential properties of the canonical passive, which in turn led to the identification of just two types of this construction, as stated at the end of the preceding section (cf. item (99)). Both intralinguistically and crosslinguistically, these two types may be restated in general terms as follows:

(100) a. The ***dynamic passive*** requires that the dynamic category (i.e. the direct object or any category standing proxy for it) move to subject position.
b. The ***static passive*** requires that the static category (i.e. the direct object or any category standing proxy for it) remain in its base position, and that the subject position be occupied by the nominal expletive.

This illustrates the fact that, along with the morphological properties of the canonical passive, the identification in (100a-b) represents one of the two parts of the native speaker's internalized **linguistic knowledge** of this construction, viz. the *structural*. Whereas the categorical and sub-categorical features of the elements incorporated in its output would represent the other part of this knowledge, viz. the *lexical*. Specifically, the latter part concerns knowledge of the sorts of lexical categories necessitated as well as the selectional properties of these categories such as the sub-categorization grid and the theta-grid of V, or any other lexical category for that matter. Given that the one-to-one relation between sub-categorization and theta-marking is reflected in the argument structure of V, the native speaker would know that, in the case of the dynamic passive, at least one internal argument in this structure must be a dynamic category in order to move to subject position such as the NP-arguments *al-nahwu* in Arabic in (101a) and *syntax* in English in (101b):

(101) a. durrisa al-nahwu fi: ha:tha: al-saffi.
(Gloss: was taught (3sm) the-syntax (Nom) in this the-class (Obl))
b. Syntax was taught in this class.

In the case of the static passive, on the other hand, the native speaker would also know that, with regard to the one-to-one relation being talked about, all the internal arguments in the argument structure of V must be static categories in order to remain in their base positions, and therefore to leave scope for the nominal expletive to surface in the subject position, such as the PP-argument *fi: ha:tha: al-saffi* 'in this class' in Arabic only as in (102), and the CP-argument both in Arabic and English, which is exemplified by the *anna*-argument in the former language as in (103a) and the *that*-argument in the latter as in (103b):

(102) a. durrisa fi: ha:tha: al-saffi.
(Gloss: was taught (he) in this the-class (Obl))
b. (Lit.: It was taught in this class.)

(103) a. qi:la anna zaydan nahawiyyun.
(Gloss: was said (he) that Zaid (Acc) syntactician (Nom))
b. It was said that Zaid was a syntactician.

Clearly, therefore, in respect of the native speaker's linguistic knowledge, both Arabic and English necessitate basically the same mechanisms underlying dynamic passives such as (101) and static passives with CP-arguments such as (103). Apart from the language-specific variation referred to above, the only difference between the two languages in internalized linguistic knowledge of the canonical passive can be detected in the mechanisms underlying static passives with PP-arguments such as (102), which are grammatical in Arabic, but not in English. This is due to the fact that, in the active versions of these passives, English permits the movement of the object of P to subject position (e.g. *This class was taught in*), a movement which is ascribable to the causative link between V and the P it requires (cf. note 14), meaning that the PP-argument *fi: ha:tha: al-saffi* 'in this class' in Arabic is a static category, whereas the NP-argument *this class* in English is a dynamic category.

Recall that the native speaker's linguistic knowledge of the canonical passive comprises both the structural component and the lexical component. The inferential power of this construction, whose LF is shareable with other linguistic expressions Ss, must also exhibit the native speaker's **pragmatic knowledge** of the same construction, otherwise its formal aspects cannot be associated with aspects of worldly experience, and therefore linguistic knowledge on its own cannot be put to actual use (cf. note 2). On the face of it, the pragmatic properties of the canonical passive are to do mainly with the semantic status of the Agent and the Patient (or the syntactic equivalent of the latter) (cf. El-Marzouk, 1998b, pp.46f., 77f.). In the light of the new terminology arrived at, these properties may be stated in (104) below to constitute the native speaker's pragmatic knowledge being talked about.

(104) a. Topicalization of patiency (or its syntactic equivalent) in the dynamic passive and impersonalization of agency in the static passive.
b. Reification of causation in both constructions.
c. Externalization of agency in both constructions.
d. Demotion of external agency in the dynamic passive and nonpromotion of internal patiency (or its syntactic equivalent) in the static passive.

Thus, like the case of internalized linguistic knowledge stated in (100a–b) above, the identification in (104a–d) also represents two distinctive, but related, parts of the native speaker's internalized **pragmatic knowledge** of the canonical passive, viz. the *semantic* and the *logical*. While the former part refers to the semantic roles of the lexical categories incorporated in this construction, the latter part concerns the logical relationships between these categories or between linguistic expressions Ss sharing the same LF in general such as 'focus', 'presupposition', and the like. This is to construct a meaningful, and therefore communicable, message out of a given linguistic expression S in real-life discourse.

It appears that the necessary association of the formal aspects of a given canonical passive with aspects of worldly experience, is in fact the necessary association of the linguistic knowledge which constitutes the formal encoding of this construction with the pragmatic knowledge which is exhibited by the native speaker's specific intention to put this formal encoding to actual use. Thus, in addition to his/her linguistic knowledge discussed above, the native speaker would know that, in the case of the dynamic passive such as (101), the constituents *durrisa* in Arabic in (101a) and *was taught* in English in (101b) are passive verbs portraying a certain activity; that the constituents *al-naẖwu* in Arabic in (101a) and *syntax* in English in (101b) represent the entity which undergoes the activity expressed by the passive verb (i.e. the Patient); that the constituents *ha:t̲h̲a: al-s̲affi* in Arabic in (101a) and *this class* in English in (101b) represent the place where the activity expressed by the passive verb is situated (i.e. the Location); and so forth. In the case of the static passive such as (103), on the other hand, the native speaker would also know that the constituents *qi:la* in Arabic in (103a) and *was said* in English in (103b) are also passive verbs but portraying a mental activity which is typical of humans; that the implicit pronominal *huwa* 'he' in Arabic in (103a) and the explicit pronominal *it* in English in (103b) are subjectivized in the form of a nominal expletive to refer specifically to a covert and indefinite human Agent; that the *anna*-argument in Arabic in (103a) and the *that*-argument in English in (103b) represent a declarative statement which undergoes the mental activity expressed by the passive verb to act as the Patient; and so forth. On this account, the inferential power of the canonical passive is indispensable for the association of its formal aspects with aspects of worldly experience.

It follows that, like the case of linguistic knowledge, aspects of pragmatic knowledge of the canonical passive both in Arabic and English would be reflected within basically the same functional paradigms via the production of any natural instance of this construction, which represents the dynamic passive as in (101) or the static passive with CP-arguments as in (103). The only difference between the two languages in internalized pragmatic knowledge of the canonical passive can, again, be detected in the functional paradigms of the static passive with PP-arguments such as (102), which, as we have already seen, is grammatical in Arabic, but not in English. This is also ascribable to the difference in internalized linguistic knowledge of this construction discussed above. That is, the fact that the PP-argument *fi: ha:t̲h̲a: al-s̲affi* 'in this class' in Arabic is a static category and the NP-argument *this class* in English is a dynamic category suggests that, in the former language, the covert and indefinite human Agent is pragmatically more significant than the Location (hence the expletive interpretation of the subjectivized pronominal), whereas the reverse would hold in the latter. Given the necessary association of formal aspects with aspects of worldly experience, the native speaker would therefore have internalized knowledge of all the general principles which underlie canonical-passive formation and its pragmatic import, together with the particular values of the parameters fixed.

It now becomes evident that any natural instance of the canonical passive (be it dynamic or static) would reflect the two sorts of the native speaker's knowledge of this construction, viz. linguistic and pragmatic, with the former comprising the structural and lexical components and the latter the semantic and logical components. As a statement that can be generalized across genetically unrelated languages, it indicates that the knowledge that both the native speaker of Arabic and the native speaker of English would possess of the same construction is in principle symmetrically balanced, since both languages necessitate basically the same set of universal principles discussed in part 1 (the idea of 'knowledge symmetry' will be further discussed in the next section). Such a generalizable statement also indicates that if the two languages differ, as they clearly do in the PF-representation, they only differ in setting the particular values of the parameters involved, viz. the word-order parameter and the [V+Pass] parameter.[22] However, the symmetrical balance in internalized knowledge cannot be perceived as an *a priori* statement about the functional correlation between the notions of *al-majhu:liyyah* in Arabic and *passivization* in English, a correlation which seems to signify that every canonical passive in the former language functions as a corresponding canonical passive in the latter, and vice versa. If this statement were

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[22] Notice that, in the case of the native speaker of Arabic, there is a further symmetrical balance between internalized knowledge of the canonical passive construction in the written variety of Arabic, Classical Arabic or Modern Standard Arabic (MSA), and internalized knowledge of the same construction in the spoken variety, where passivization is normally expressed by the morphologically marked reflexive. For example:

	Written	Spoken	
(i)	a. *durisa*	a'. *n'daras*	'to be studied'
	b. *qi:la*	b'. *n'qa:l*	'to be said'
	c. *durrisa*	c'. *t'darras*	'to be taught'
	d. *ẖu:riba*	d'. *t'ẖa:rab*	'to be fought (against)'

Here, there would be no fundamental difference between the two varieties of Arabic in the word-order parameter and the [V+Pass] parameter, even though the SVO-value of the former parameter tends to be fixed as the principal word order in the spoken variety, with the other types of word order such as VSO, VOS, OVS, etc. being secondary variants. Since the variety of Arabic intended in the present study is the written one, where the principal word order is VSO (cf. Saad, 1982, pp.8f.), we assume that the native speaker of Arabic (typically a university student) possesses knowledge of the canonical passive construction in this variety in exactly the same way the native speaker of English (also typically a university student) does of the English counterpart.

constantly verifiable, then the structural conditions for both notions would provide the formal input to what Chomsky terms 'canonical structural realization' (CSR), a process whereby the argument structure of V, for instance, is to be semantically selected and canonically realized as a specific set of syntactic categories such as NPs, PPs, or CPs (cf. Chomsky, 1986a, p.87). For example:

(105) a. turjima al-kita:bu.
(Gloss: was translated (3sm) the-book (Nom))
b. The book was translated.

(106) a. wud̲i?̲a al-kita:bu ?̲ala: al-raffi.
(Gloss: was put (3sm) the-book (Nom) on the-shelf (Obl))
b. The book was put on the shelf.

(107) a. qi:la anna al-kita:ba thawriyyun.
(Gloss: was said (he) that the-book (Acc) revolutionary (Nom))
b. It was said that the book was revolutionary.

In these examples, the functioning of CSR would require something like the following representations so far as the argument structure of V is concerned: In example (105), the Patient-argument, *al-kita:bu* in Arabic and *the book* in English, is to be s-selected and c-realized as an NP, a syntactic category which represents this argument as a phrasal constituent within the sub-categorization grid of the passive verb *turjima* 'to be translated'. In example (106), the Locative-argument, *?̲ala: al-raffi* in Arabic and *on the shelf* in English, is to be s-selected and c-realized as a PP, a syntactic category which also represents this argument as a phrasal constituent within the sub-categorization grid of the passive verb *wud̲i?̲a* 'to be put'. In example (107), the *anna*-argument in Arabic and the *that*-argument in English are to be s-selected and c-realized as a CP, a syntactic category which represents these arguments as a sentential constituent within the sub-categorization grid of the passive verb *qi:la* 'to be said' (cf. section 1.3). In such a perspective, to represent a certain argument via the functioning of CSR means to structurally encode this argument within the appropriate sub-categorization grid that is selected by a certain passive verb, and therefore to create a syntactic precondition for the functioning of Spell-Out at PF. Accordingly, the syntactic precondition would in principle be the process of feature checking, since the argument in question is assumed to be selected from the lexicon as a fully inflected lexical item (cf. section 1.1). The correlative functioning of CSR, however, may well be relevant but only to the canonical passives in Arabic that do in fact function as corresponding canonical passives in English, given the native speaker's linguistic and pragmatic knowledge. But what about those canonical passives in Arabic that do not function as corresponding canonical passives in English on the one hand, and those canonical passives in English that do not function as corresponding canonical passives in Arabic on the other? The answer to this question would be far from satisfactory without considering the potential frequency differences between the two languages in this construction.

As discussed throughout, the variety of Arabic intended in the present study is the written one, be it Classical Arabic or its modern extension, Modern Standard Arabic (MSA), since the canonical passive verb that occurs in this variety is normally replaced by the morphologically marked reflexive in the spoken variety (see note 22). This intention is motivated by the fact that the morphological structure of the canonical passive verb in the written variety has not undergone any fundamental vocalic or consonantal alteration since the period of pre-Islamic poetry which remained intact until the sixth century AD. Thus, in order to investigate the frequency differences in the canonical passive between Classical Arabic and English (Classical and Contemporary), a simple but time-consuming method was used in an earlier study (cf. El-Marzouk, 1998a). As a standard example of Classical Arabic, the Koran was chosen in this study, where all the canonical passives that recur in the first nineteen chapters (or suras) were counted. Then, the same nineteen chapters of each of three English versions (Ali, 1934/46; Dawood, 1956/90; Arberry, 1964/90) were examined in the same way. Following this, the results of both the Arabic text and the three English versions were illustrated along the following frequency paradigms.[23]

(108) a. **Paradigm A**: The total number of canonical passives in Arabic.
b. **Paradigm B**: The total number of canonical passives in English.
c. **Paradigm C**: The number of canonical passives in Arabic which function as corresponding canonical passives in English.
d. **Paradigm D**: The number of canonical passives in Arabic which do not function as corresponding canonical passives in English.
e. **Paradigm E**: The number of canonical passives in English which do not function as corresponding canonical passives in Arabic.

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[23] To consider the potential frequency differences between Arabic and English by reference to the written form of either language seems to be the only plausible procedure in this context, even though language is, historically speaking, primarily a speech process within a particular speech community (cf. section 1.1). This is due to the fact that it is impossible to find a 'standard' example of spoken Arabic which is rendered into a corresponding 'standard' example of spoken English, or vice versa.

In our work just cited, the language of the three English versions covers two distinct diachronic dimensions of English so far as the Classical Arabic of the Koran is concerned: Both Ali (1934/46) and Arberry (1964/90) use Classical English (mainly the English of the sixteenth and seventeenth centuries), whereas Dawood (1956/90) employs Contemporary English (mainly present-day literary English). The principal reason for this method was to demonstrate that the underproduction trials made by the Arabic-speaking learners of English at the canonical passive could not be attributed to what is erroneously known as 'avoidance phenomena', but rather to the much less frequent use of this construction in L1 Arabic than it is in L2 English.[24] In the current study, however, discussion of the frequency paradigms shown in (108) above will be confined to the Arabic text and its English equivalent in Dawood's (1956/90) version simply because it is the only version that employs Contemporary English. On these grounds, the frequency counts of the canonical passives were recorded in accordance with the same frequency paradigms as in (109) below. Notice that, apart from the typological divergence between Arabic and English, the canonical passives of paradigms A and B are only those which reflect the native speaker's linguistic and pragmatic knowledge restated in (100) and (104) respectively.

(109) a. **Paradigm A**: 531 examples
b. **Paradigm B**: 911 examples
c. **Paradigm C**: 414 examples
d. **Paradigm D**: 117 examples
e. **Paradigm E**: 497 examples

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[24] Among the large number of misunderstandings in L2 acquisition research, the phenomenon 'explored' by Schachter (1974) and subsequently by Kleinmann (1977;1978) is thought to be an indication of 'avoidance', a term borrowed from behaviourist psychology whose precise definition (i.e. prevention or delay of an absent aversive stimulus) has nothing to do with the 'explored' phenomenon. The false premise that these researchers have started from is the *a priori* correlation between avoidance and the learning difficulty predicted on the basis of a contrastive analysis of L1 and L2 (the learner's L1 and the L2 he/she is learning). Such a premise has led them to conclude that the learner avoids a given L2 structure whenever he/she perceives cross-linguistic variation between L1 and L2, meaning that, for every avoidance trial, there is always a pair of L1-L2 structures to be perceived as radically different! If this were true then the false premise, which implies that every example of a given structure in the L1 functions as a corresponding example of the same structure in the L2, and vice versa, would also be true! (for a detailed analysis, see El-Marzouk, 1995a; El-Marzouk, 1998a).

As the frequency counts recorded in (109) illustrate, the striking difference between paradigms A and B (531 examples in Arabic *vs.* 911 examples in English, respectively) has in fact given rise to three empirical observations. The first observation refers to the actual frequency level of functional convergence between Arabic and English in canonical passivization as recorded in paradigm C, where the convergence exists in 414 examples (approximately 78% of the 531 examples in Arabic *vs.* approximately 45.5% of the 911 examples in English). The second and third observations, on the other hand, refer to the residual frequency levels of functional divergence between Arabic and English in the same construction as recorded in paradigms D and E from the viewpoint of either language: while paradigm D indicates that 117 out of the 531 canonical passives in Arabic (approx. 22%) do not function as corresponding canonical passives in English, paradigm E suggests that 497 out of the 911 canonical passives in English (approx. 54.5%) do not function as corresponding canonical passives in Arabic. Therefore, the striking difference between paradigms A and B is clear evidence that the canonical passive in English is far more important than it is in Arabic at the pragmatic level, even though the Koran, with its typical embodiment of impersonal style, employs a comparatively high percentage of instances of this construction, as will be seen presently. Accordingly, the choice of the Koran and its English version in the current study can be justified for a number of reasons.

Firstly, the Classical Arabic of the Koran, whose codification began in the eighth century, is considered an indispensable source for Arabic Linguistics in general (cf. Holes, 1994). This means that an examination of any other text with an English translation would not satisfy generalizations about paradigms C, D, and E. Secondly, to all scholars of Arabic Linguistics, the written variety of Arabic *is* Classical Arabic or MSA, the variety that extends from pre-Islamic poetry to modern books and journals, and is used as a standard written form all over the Arabic-speaking world (cf. Ferguson, 1972). Thirdly, due to numerous factors which are beyond the scope of this study, the written variety exhibits essentially the same sound system and morphology but with certain variations in lexis and forms of discourse, which seem to have no bearing on the morpho-phonological distribution of the canonical passive. It is thus the spoken variety that offers tremendous variations at all linguistic levels (cf. Ferguson, 1970). Fourthly, Jeffrey Kallen (personal communication) has pointed to the important observation that "the translator of the Koran into English is faced with normative considerations which may cause a translation to be 'faithful' to the original in ways which other texts may not need to be". The point we would therefore want to make is that, in spite of such normative considerations of 'faithfulness', there exist certain canonical passives in Arabic which do not function as corresponding canonical passives in English (paradigm D) on the one hand, and certain canonical passives in English which do not function as corresponding canonical passives in Arabic (paradigm E) on the other. This means that if genetically unrelated languages such as these converge in the instantiation of the dynamic and static passive types as the sole universal dichotomization, then other ways of distinguishing them can be recast with reference to the functional dimension in the sense intended here.

So it can be seen that the frequency counts recorded in (109) are typical exemplifications of the potential for the functional convergence and divergence between Arabic and English in canonical passivization. Thus, paradigms C, D, and E were arrived at via an empirically inductive method to essentially draw reasonable conclusions that can be generalized across genetically unrelated languages. On this account, we believe that the first nineteen chapters of the Koran chosen as a standard example of Classical Arabic (or any form of written Arabic, for that matter) will, in addition to their English counterparts in Dawood's (1956/90) version, serve as a plausible corpus of linguistic data for the arrival at these conclusions once the proportional relationship between the two languages is highlighted as recorded in paradigms A and B. Empirically speaking, the frequency counts shown in (109a–b) in terms of these two paradigms (531 examples in Arabic *vs.* 911 examples in English) demonstrate that Classical Arabic makes far less use of the canonical passive than English does, even though the Koran, with its typical embodiment of abstractions and generalizations in a typically impersonal style, incorporates a comparatively high percentage of instances of this construction. This fact indicates that if the same method were to be conducted on any other text written in Classical Arabic or MSA and translated into English (or vice versa), then the frequency counts would bring to light a far more striking functional divergence than what is recorded in paradigms A and B as in (109a–b). Yet it does not necessarily imply that the Arabic canonical passive, in general, constitutes a subset of the English counterpart. In Arabic, in particular, the logical foundation of passivization can be symbolized in several different ways, and therefore expressed through the implementation of several structurally different devices, which are beyond the range of this study. As necessary preliminaries to further discussion, let us consider in turn what each of the three paradigms C, D, and E stated in (108c–e) would follow from.

(i) Paradigm C

Recall that the first empirical observation recorded in accordance with paradigm C addresses the actual frequency level of functional convergence between Arabic and English in canonical passivization (cf. (109)). The universal dynamic-static polarity, however, does not necessarily imply a one-to-one correlation between instances of either type in a given pair of languages instantiating a corpus of data in accordance with the same paradigm. As we saw earlier, certain syntactic categories in Arabic prove to be potentially dynamic, whereas their counterparts in English are constantly static, and vice versa (cf. examples (93–94), (96–97)), meaning that certain instances of the dynamic passive type in the former language function as corresponding instances of the static passive type in the latter, and vice versa (see also examples (101–103)). This is precisely the case with paradigm C stated in (108c) and the first empirical observation recorded in (109c), a case signifying that paradigm C entails four sub-paradigms as stated in (110).

(110) a. **Sub-paradigm C1**: The number of dynamic passives in Arabic which function as corresponding dynamic passives in English.
b. **Sub-paradigm C2**: The number of static passives in Arabic which function as corresponding static passives in English.
c. **Sub-paradigm C3**: The number of dynamic passives in Arabic which function as corresponding static passives in English.
d. **Sub-paradigm C4**: The number of static passives in Arabic which function as corresponding dynamic passives in English.

Given the first empirical observation recorded in paradigm C as in (109c), the 414 canonical passives in Arabic that actually function as corresponding canonical passives in English indicate a low level of frequency overlap between the two languages, even though this figure forms a comparatively high percentage of the total number of canonical passives in Arabic as recorded in paradigm A (app. 78% out of 531 examples). This is due to the empirical fact that the same figure forms a lower percentage of the total number of canonical passives in English as recorded in paradigm B (app. 45.5% out of 911 examples). However, despite this low level of frequency overlap, the empirical observation under discussion is proof enough that there exist in Arabic certain canonical passives which constantly function as corresponding canonical passives in English and vice versa. Hence, the absence of the one-to-one correlation between instances of dynamic and static passive types is verified by the frequency counts in accordance with the four sub-paradigms stated in (110) above as in (111) below.

(111) a. **Sub-paradigm C1**: 375 examples
b. **Sub-paradigm C2**: 15 examples
c. **Sub-paradigm C3**: 1 example
d. **Sub-paradigm C4**: 23 examples

As the frequency counts recorded in (111) illustrate, the figure of 414 examples recorded in paradigm C as in (109c) has given rise to four further empirical observations. The first and second observations refer to the actual frequency levels of **functional homogeneity** among instances of either type of the canonical passive in Arabic and English as recorded in sub-paradigms C1 and C2: the former shows that 375 out of the 414 examples (app. 90.6%) actually function as corresponding dynamic passives in Arabic and English; and the latter illustrates that 15 out of the 414 examples (app. 3.6%) actually function as corresponding static passives in both languages. The third and fourth observations, on the other hand, refer to the residual frequency levels of **functional heterogeneity** among instances of either type as recorded in sub-paradigms C3 and C4 from the viewpoint of either language: while sub-paradigm C3 indicates that only 1 out of the 414 examples (app. 0.2%) marks a dynamic passive in Arabic which functions as a corresponding static passive in English, sub-paradigm C4 suggests that 23 out of the 414 examples (app. 5.5%) mark static passives in Arabic which function as corresponding dynamic passives in English. These four sub-paradigms will be discussed in turn, with the first two relating to functional homogeneity and the second two to functional heterogeneity.

Concerning sub-paradigm C1, the empirical observation recorded in (111a) demonstrates that the vast majority of the canonical passives in Arabic which function as corresponding canonical passives in English are actually instances of the dynamic passive type (app. 90.5%). This is attributable to the fact that each lexical verb used in these canonical passives s-selects basically the same pair of argument structures, provided that each pair of corresponding arguments in one such pair of argument structures is assigned an identical theta-role. Thus, the syntactic categories which render these canonical passives dynamic behave within exactly the same configuration in both languages, since these categories are characterized by the same syntactic nature. That is, they have the potential for movement to subject position under canonical passivization because they are dynamic categories occupying internal positions in the argument structures being talked about. As discussed in part 1, the categories that have the potential for movement to subject position are the direct object or any category standing proxy for it, a statement that can be generalized across all languages instantiating the canonical passive (cf. section 1.4).

However, it is the categories standing proxy for the direct object which may vary from one such language to another for reasons which have to do with the idiosyncratic behaviour of these categories. For ease of exposition, the categories that can stand proxy for the direct object under canonical passivization in Arabic and English are illustrated in (112) and (113) respectively:

(112) a. The indirect object.
b. The cognate object.
c. The adverbial object (time and place).

(113) a. The indirect object.
b. The object of a preposition.
c. The embedded *that*-argument (cf. *believe*).

To maintain the generalization in question, all these categories can, in addition to the direct object, move to subject position under specified conditions, thereby generating the dynamic passive. In the case of Arabic the categories shown in (112a–c) operate within an inherent hierarchy among them: If the direct object is lexically or syntactically absent,[25] then the indirect object would be the candidate for subject position; if, however, both the direct and indirect objects are lexically or syntactically absent, then either the cognate or the adverbial object would be the candidate for the same position. In the case of the English categories illustrated in (113a-c), the same inherent hierarchy would hold for the first two categories as well as the direct object (that is, either the direct or indirect object, otherwise the object of a preposition would be the candidate), whereas the embedded *that*-argument would also be the candidate but only with verbs such as *believe* within a marginally exceptional situation (cf. note 15). It follows that what the two languages have in common is simply the instantiation of the dynamic passive type through the incorporation of the categories in (112a-c) and (113a-c). The functional homogeneity among instances of this type can only be maintained through the incorporation of the direct and indirect objects. This is because Arabic and English converge in the potential dynamicness of these two categories only, but they in fact diverge in that of the other categories: At one extreme, both the cognate and adverbial objects are potentially dynamic in Arabic, whereas their counterparts in English are constantly static; and at the other, both the object of a preposition and the embedded *that*-argument are potentially dynamic in English, whereas their counterparts in Arabic are constantly static. Given these existing facts, the only instances of the dynamic passive type in Arabic that do in fact function as corresponding instances of this type in English (or vice versa) are those which incorporate either *passivizable* transitive verbs or ditransitive verbs, since the former require a single object (a direct one) and the latter two objects (a direct and an indirect ones).[26] This is precisely what the empirical observation recorded in sub-paradigm C1 as in (111a) has demonstrated in conformity with functional homogeneity, meaning that the vast majority of the canonical passives in Arabic that function as corresponding canonical passives in English are actually dynamic passives incorporating either passivizable transitive verbs or ditransitive verbs (app. 90.6%).

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[25] By 'syntactically absent' I mean that the direct object in question is lexically present but is not syntactically available for movement to subject position under canonical passivization. That is, it behaves in such a configuration which inhibits its movement to the same position, a configuration that is typical of ditransitive verbs such as *a?ta:* 'to give', etc. For instance, the 'direct' object *?amrin* 'Amr' in (i) below acts as the object of the preposition *li-* 'to' to be an indirect one, for which reason it cannot move to subject position under canonical passivization as in (ii) below, unless another process such as 'indirect-object advancement' is applied as in (iii) below.

(i) a. a?ta: zaydun al-kita:ba li-?amrin.
(Gloss: gave (3sm) Zaid (Nom) the-book (Acc) to-Amr (Obl))
b. Zaid gave the book to Amr.

(ii) a. u?tiya al-kita:bu li-?amrin.
(Gloss: was given (3sm) the-book (Nom) to-Amr (Obl))
b. The book was given to Amr.

(iii) a. u?tiya ?amrun al-kita:ba.
(Gloss: was given (3sm) Amr (Nom) the-book (Acc))
b. Amr was given the book.

As for sub-paradigm C2, another sub-paradigm relating to functional homogeneity but among static passives in Arabic and English this time, the empirical observation recorded in (111b) demonstrates that approximately 3.6% of the canonical passives in Arabic which function as corresponding canonical passives in English are actually static passives (a far lower percentage than the case with sub-paradigm C1). Typologically speaking, this is attributable to the fact that what is known as the 'impersonal passive' constitutes a far less common type than the so-called 'personal passive' (cf. El-Marzouk, 1998b, p.64). In addition, the empirical observations recorded in (111c–d) also indicate that not all static passives in Arabic function as corresponding static passives in English (or vice versa), observations which are the concern of subparadigms C3 and C4, as will be seen presently. However, functional homogeneity among static passives suggests that each lexical verb used in these passives s-selects basically the same pair of argument structures, where all the internal arguments are static categories. Accordingly, such internal arguments remain in their base-positions, so as to leave scope for the insertion of the nominal expletive in subject position. As discussed in part 1, the internal arguments that act as static categories under canonical passivization are in general the direct object or any category standing proxy for it, a statement that, like the case with dynamic categories, can also be generalized across all languages instantiating the canonical passive. Such a generalization was introduced to capture the fact that, in languages such as Ukrainian and Welsh, there exist certain examples of this construction where the direct object remains in its base-position and the nominal expletive is inserted in subject position (cf. note 21). Yet, unlike the case with dynamic categories (where the generalization specifies at least the direct object as a common denominator), all the static categories captured by the same generalization may vary from one language to another. In other words, the generalization about the dynamic categories is in fact 'universally stronger' than that about static categories, since the former takes at least another denominator, albeit a less common one, to stand proxy for the direct object, viz. the indirect object (cf. (112-113)). Thus, neither in Arabic nor in English are the direct and indirect objects static categories, meaning that if there exists a common denominator between static categories in both languages, there may not exist a less common one to stand proxy for it. Hence, all the internal arguments that act as static categories under canonical passivization in Arabic and English are illustrated in (114) and (115) respectively.

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[26] Notice that I am using the term 'passivizable' for transitive verbs in accordance with the proposed structural condition for the so-called 'personal passive', which was introduced and reconsidered in detail in part 1 (cf. section 1.2, item (43); section 1.3, item (48)). This is because there exist in Arabic and English (or any other language, for that matter) certain transitive verbs that are not passivizable, but I know of no ditransitive verb that is not passivizable.

(114) a. The PP-argument (V-complement).
b. The embedded *anna*-argument.

(115) a. The embedded *that*-argument.
b. The embedded infinitival argument (cf. *decide*).

It appears that what Arabic and English have in common is, again, simply the instantiation of the static passive type via the incorporation of the static categories cited in (114) and (115) respectively. However, the functional homogeneity among instances of this type can only be maintained via the incorporation of the embedded CP-argument as in (114b) and (115a), notwithstanding the marginally exceptional case with

English verbs such as *believe* (cf. (113c)). This is because Arabic and English only converge in the staticness of this category, but they in fact diverge in that of the other categories as in (114a) and (115b): At one end, the PP-argument is constantly static in Arabic, whereas the object of the preposition in the English counterpart is potentially dynamic (cf. (113)); and at the other, the embedded infinitival argument with idiosyncratic verbs such as *decide* in English is constantly static, whereas its counterpart in Arabic is potentially dynamic (cf. note 16). Given these existing facts, the only instances of the static passive type in Arabic that do in fact function as corresponding instances of this type in English (or vice versa) are those which incorporate certain ditransitive verbs. As we saw earlier, these verbs include what is traditionally known as 'verbs of certainty' such as *?arafa* 'to know', *i?taqada* 'to believe', etc. and 'verbs of uncertainty' such as *Thanna* 'to assume', *qa:la* 'to say', etc. Characteristic of these verbs is the semantic association of the two objects they require with a nominal sentence which acts as the embedded CP-argument itself in Arabic and English (cf. examples (70-72)). Thus, in conformity with functional homogeneity among static passives, the empirical observation recorded in sub-paradigm C2 as in (111b) has demonstrated that all such passives incorporate ditransitive verbs of the type just mentioned.

In respect of sub-paradigm C3, the empirical observation recorded in (111c) demonstrates that only one example of the dynamic passive type in Arabic actually functions as a corresponding example of the static passive type in English, an idiosyncratic representation which constitutes an almost nonexistent percentage of the canonical passives that establish functional heterogeneity (app. 0.2%). Thus, it can safely be said to mark nothing more than a marginally exceptional situation to the vast majority of the canonical passives that do in fact establish functional homogeneity. As it so appears, this example incorporates a ditransitive verb in a configuration where the indirect object is structurally represented as an embedded CP-argument which moves to subject position in Arabic as in (116a) but not in English as in (116b), a configuration which also includes the Arabic verb *qarrara* and its English counterpart *decide* within a marked case (cf. note 16).

(116) a. yu:ha: ilay-ya annama: ila:hu-kum ila:hun wa:hidun. (XVIII:110)
(Gloss: is revealed (3sm) to-me (Obl) that God-your God (Nom) one (Nom))
(Lit.: That your God is one God is revealed to me.)
b. It is revealed to me that your God is one God.

With regard to sub-paradigm C4, another sub-paradigm relating to functional heterogeneity among canonical passives in Arabic and English but in the opposite direction this time, the empirical observation recorded in (111d) demonstrates that approximately 5.5% of these canonical passives are actually examples of the static passive in Arabic which function as corresponding examples of the dynamic passive in English (a higher percentage than the case with sub-paradigm C3). This can be reduced to the syntactic behaviour of the PP-argument which occupies the position of a V-complement, a category that marks syntactic divergence between the two languages, as seen. While this PP-argument is constantly static in Arabic, the object of the preposition in the English equivalent is potentially dynamic (cf. (113b) and (114a)). Thus, in most of the Arabic canonical passives recorded in sub-paradigm C4, the lexical verb requires a given preposition to act as a phrasal verb in the language-particular sense (cf. examples (63-65); (96)).

(ii) Paradigm D

The second empirical observation recorded in paradigm D as in (109d) demonstrates that approximately 22% of the total number of canonical passives in Arabic (117 out of 531 examples) do not function as corresponding canonical passives in English. This, however, cannot always be explained in terms of the syntactic behaviour of the categories involved under specified conditions as is the case with paradigm C discussed above. Rather, it may be explicable in terms of the lexical properties of the lexical verbs themselves, so that certain pragmatic considerations may render certain examples more appropriate in either language than they are in the other. Accordingly, the figure of 117 examples does not necessarily imply that each of these examples would constantly mark a functional divergence between Arabic and English in the canonical passive from the standpoint of the former language. Hence, the distinction between the two types of this construction (dynamic and static) also suggests that paradigm D be considered in terms of two further sub-paradigms as stated in (117).

(117) a. **Sub-paradigm D1**: The number of canonical passives of the dynamic type in Arabic which do not function as corresponding canonical passives of either type in English.

b. **Sub-paradigm D2**: The number of canonical passives of the static type in Arabic which do not function as corresponding canonical passives of either type in English.

Given the second empirical observation recorded in paradigm D as in (109d), the figure of 117 examples indicates in fact the residual level of the potential frequency difference between Arabic and English in the canonical passive from the perspective of the former language. Thus, the percentage recorded in this level (app. 22%) is clear evidence that there exist certain canonical passives in Arabic which, when rendered into corresponding canonical passives in English, would reflect either linguistic unacceptability or pragmatic inappropriateness, even though some may not mark ungrammaticality from the viewpoint of the standard norm of English. The frequency counts of these canonical passives in accordance with the two sub-paradigms stated in (117) above are shown in (118) below.

(118) a. **Sub-paradigm D1**: 106 examples
b. **Sub-paradigm D2**: 11 examples

As the frequency counts recorded in (118) illustrate, the figure of 117 examples has shed light on two further empirical observations. The first observation refers to the actual frequency level of functional divergence between Arabic and English in the canonical passive as recorded in sub-paradigm D1, where the frequency level shows that 106 out of the 117 examples (app. 90.6%) are in fact instances of the dynamic passive type in Arabic which do not function as corresponding instances of either type in English. The second observation relates to the residual frequency level of functional divergence between the two languages in the same construction as recorded in sub-paradigm D2, where the frequency level illustrates that 11 out of the 117 examples (app. 9.4%) are in fact instances of the static passive type in Arabic which do not function as corresponding instances of either type in English. Therefore, sub-paradigm D1 relates to 'functional divergence in dynamic passivization', whereas sub-paradigm D2 refers to 'functional divergence in static passivization'.

With respect to sub-paradigm D1, the empirical observation recorded in (118a) above demonstrates that the vast majority of the canonical passives in Arabic which do not function as corresponding canonical passives in English are actually instances of the dynamic passive type in the former language (app. 90.6%). In most cases, this is reducible to the lexical properties of the lexical verbs incorporated in these canonical passives in Arabic alone, since their counterparts in English would not reflect the same properties. Thus, unlike the case of sub-paradigm C1 (where the vast majority of the canonical passives in Arabic that function as corresponding canonical passives in English are actually dynamic passives), the one-to-one correlation between the argument structures s-selected by these verbs, and therefore between the theta-roles assigned to the arguments in these argument structures, does not always hold. Recall that the canonical passives recorded in sub-paradigm C1 are specifically dynamic passives incorporating either passivizable transitive verbs or ditransitive verbs (see also note 26). Surprisingly, all the canonical passives recorded in sub-paradigm D1 are also dynamic passives incorporating the same types of verbs. However, this does not necessarily mean that none of these verbs will passivize in any possible rendering in English, though some may prove to be pragmatically inappropriate. Nor does it mean that the direct and indirect objects are the only categories which may lead to examples in accordance with sub-paradigm D1, since there exist in Arabic other categories such as the cognate and adverbial objects which, together with their English counterparts, also result in examples in accordance with the same sub-paradigm. As mentioned earlier, these categories are potentially dynamic, and may therefore lead to instances of the dynamic passive type, even if the lexical verbs involved are characterized by a low-transitivity nature (cf. items (112b-c)). Given that the English counterparts are constantly static, we expect contrasts such as these to mark functional divergence in accordance with sub-paradigm D1. Yet, they constitute nothing more than a marked case since none of them occurs in the first nineteen chapters of the Koran, albeit existent in the language (cf. examples (66-68)).

With regard to sub-paradigm D2 stated in (117b), the empirical observation recorded in (118b) demonstrates that approximately 9.4% of the canonical passives in Arabic which do not function as corresponding canonical passives in English are actually instances of the static passive type, a far less percentage than that recorded in sub-paradigm D1. This can also be reduced to the lexical properties of the lexical verbs incorporated as well as some other properties which render them static in Arabic specifically. That is, most of such verbs are phrasalized via certain prepositions which establish with them a causative relation, a fact that would exhibit a contrast in terms of sub-paradigm C4 (static passives in Arabic *vs.* dynamic passives in English). Thus, unlike the case of sub-paradigm C2 (static passives in Arabic *vs.* static passive in English) the one-to-one correlation between the staticness of the internal arguments s-selected by the verbs in question does not hold. Recall that the contrasts recorded in sub-paradigm C2 are in general instances of the static passives with a CP-argument. The generalization is thus as follows: ***Arabic and English converge in the static passive with a CP-argument because they converge in the staticness of this argument*** (cf. items (114-115)). Recall, further, that the contrasts recorded in sub-paradigm C4 are in general static passives with a PP-argument in Arabic versus dynamic passives in English. Likewise, the generalization runs as follows: ***Arabic and English diverge in the static passive with a PP-argument because they diverge in the syntactic behaviour of this argument***. Yet, this latter generalization does not imply functional divergence in the canonical passive, but rather functional convergence reflecting functional heterogeneity among the two types of this construction. In other words, functional divergence in the syntactic behaviour of the PP-argument results in two empirical observations: first, functional heterogeneity in accord with sub-paradigm C4 (static passives in Arabic *vs.* dynamic passives in English); and second, functional divergence in accord with sub-paradigm D2 (static passives in Arabic *vs.* non-passives in English).

(iii) Paradigm E

The third empirical observation recorded in paradigm E as in (109e) above demonstrates that approximately 54.5% of the total number of canonical passives in English (497 out of 911 examples) do not function as corresponding canonical passives in Arabic, a much higher percentage than that recorded in paradigm D. Although not all these examples would constantly mark functional divergence between Arabic and English from the perspective of the latter language, such a percentage is indicative of the fact, among others, that the pragmatic connotations of passivization can be expressed via a number of structurally distinct devices in Arabic specifically. Thus, like the case of paradigm D, the distinction between the dynamic and static passive types also suggests that paradigm E be considered in terms of two further sub-paradigms as stated in (119).

(119) a. **Sub-paradigm E1**: The number of canonical passives of the dynamic type in English which do not function as corresponding canonical passives of either type in Arabic.
b. **Sub-paradigm E2**: The number of canonical passives of the static type in English which do not function as corresponding canonical passives of either type in Arabic.

Similarly, the third empirical observation recorded in paradigm E as in (109e) shows in fact that the figure of 497 examples addresses the residual level of the potential frequency difference between Arabic and English in the canonical passive but from the standpoint of the latter language this time. Thus, the comparatively high percentage recorded in this level (app. 54.5%) is also proof that there exist certain canonical passives in English which, upon functioning as corresponding canonical passives in Arabic, would exhibit either linguistic unacceptability or pragmatic inappropriateness, even though some may not mark ungrammaticality from the viewpoint of the standard norm of Arabic. The frequency counts of these canonical passives in accordance with the two sub-paradigms stated in (119) above are shown in (120) below.

(120) a. **Sub-paradigm E1**: 497 examples

b. **Sub-paradigm E2**: None

As the frequency counts recorded in (120) illustrate, the concrete figure of 497 examples recorded in paradigm E as in (109e) has in fact brought to light two further empirical observations. The first observation refers to the actual frequency level of functional divergence between Arabic and English in the canonical passive as recorded in sub-paradigm E1, where the frequency level shows that the same figure of 497 examples are in fact instances of the dynamic passive type in English which do not function as corresponding instances of either type in Arabic. The second observation relates to the residual frequency level of functional divergence between the two languages in the same construction as recorded in sub-paradigm E2, where the frequency level illustrates that none of the 497 examples is an instance of the static passive type in English which does not function as a corresponding instance of either type in Arabic, a level which constitutes the most striking difference. Recall that the striking difference between paradigms A and B recorded in (109a–b) is evidence of a low level of frequency overlap between Arabic and English in the canonical passive in general (531 examples *vs.* 911 examples, respectively). Recall, also, that this low level is identified with 414 examples as recorded in paradigm C in (109c). Now if all the 497 examples (the result of subtracting 414 from 911) are instances of the dynamic passive as recorded in sub-paradigm E1 in (120a), then one would come to the obvious conclusion that no non-passive in Arabic which may function as a corresponding canonical passive in English would be an instance of the static passive, though the reverse is not true. This is because Arabic and English converge in the static passive with a CP-argument, notwithstanding the marked case with verbs such as *believe* and *decide* (cf. items (112-113); (114-115)). Given that the non-passives in Arabic may mark verbalization [+V] or nominalization [+N], the functional divergence in accord with sub-paradigm E1 exhibits two sorts of contrast: 'dynamic passives *vs.* non-passives [+V]' and 'dynamic passives *vs.* non-passives [+N]'.

The first contrast 'dynamic passives *vs.* non-passives [+V]' seems to be explicable in terms of the agentive-agentless distinction. As mentioned earlier, in languages instantiating the canonical passive the vast majority of natural instances of this construction are agentless, instances of the so-called 'short passive' (e.g. app. 95% in Arabic *vs.* app. 85% in English) (cf. note 7). That is, in the unmarked situation the agentive PP is necessarily deleted, whereas in the marked situation it is necessarily inserted, for which reason the former has been the principal concern of the current study. However, the difference between the two languages in the percentages just cited is not irrelevant to the matter in hand: the extremely predominant agentless nature of the canonical passives in Arabic (app. 95%)[27] tends to minimize the functional divergence across certain Arabic 'patientive' actives and English agentive passives, since the agentless nature of the canonical passives in English is less predominant (app. 85%). Given the striking difference between sub-paradigms E1 and E2 in (120) above, minimization means, therefore, that there exist in Arabic certain non-passives [+V] incorporating a patientive NP within a defining relative clause which play their pragmatic roles in much the same way certain dynamic passives incorporating an agentive PP in English do due to the transitivity of the lexical verbs involved, as shown in (121).

(121) a. ula:?ika yal?anu-hum alla:hu. (II:159)

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[27] In empirical corroboration of the extremely predominant agentless nature of the canonical passives in Arabic (app. 95%), the figure of 531 examples recorded in paradigm A (cf. (109a)) finds that only 28 examples express overt agentive PPs which incorporate a set of Ps to denote agency but within a very restricted scope of referentiality. These Ps are classified in terms of their frequency counts as follows:

(i) a. 24 examples with the P *min(ladun)* 'from' and an animate Agent.
    b. 1 example with the P *?inda* 'at (a meeting of)' and an animate Agent.
    c. 1 example with the PP *?ala: lisa:ni* 'on the tongue of' and an animate Agent that is associated with an articulatory activity specifically (e.g. *la?ana* 'to curse', *qa:la* 'to say', etc.).
    d. 2 examples with the P *bi-* 'by' and an inanimate Agent.

It is interesting to see that up to the fourteenth century *from* was used as the principal P to denote agency in Old English, with the use of other Ps like *with, of, at*, etc. as secondary. Only later, however, did the P *by* develop diachronically out of the bound morpheme *be-* (cf. Fraser, 1987). But the scope of referentiality of the agentive PP in Arabic is still more restricted than that of the English counterpart, since the former refers to one of two sorts of entities: first, an **idealized entity** such as the abstract reference to God in the unmarked case and the concrete reference to a given prophet in the marked case as in (iia-b) below; and second, a **generalized entity** such as the indefinite reference to someone or something in the marked case as in (iiia-b) below.

(ii) a. wa-ma: unzila ilay-ka ***min rabbi-ka***. (V:64)
        (Lit.: And what was revealed to you ***from your Lord***.)
    b. lu?ina allathi:na….***?ala: lisa:ni da:wu:da***…. (V:78)
        (Lit.: Those….were cursed ***on the tongue of David***….)

(iii) a. fa-man ?ufiya la-hu ***min aki:-hi*** šay?un. (II:178)
        (Lit.: He who is pardoned ***from his brother*** aught.)
    b. an tubsala nafsun ***bi-ma: kasabat***. (VI:70)
        (Lit.: Lest a soul be destroyed ***by what it earned***.)

(Gloss: those (plm) curse (3sm)-them (Acc) God (Nom))
(Lit.: Those, God will curse them.)
b. Those….shall be cursed by God.

Concerning the second contrast 'dynamic passives *vs.* non-passives [+N]', the striking difference between sub-paradigms E1 and E2 recorded in (120) also indicates that there exist in Arabic certain non-passives incorporating a variety of derived nominals which play their pragmatic roles in much the same way certain canonical passives in English do. Given the conclusion that no non-passive in Arabic may function as a corresponding static passive in English (but not vice versa), the examples being talked about seem also to establish a contrast between non-passives [+N] in the former language and dynamic passives in the latter, thereby marking functional divergence between the two languages in accordance with sub-paradigm E1 as shown in (122).

(122) a. a-?inna: la-fi: k̲alqin jadi:din. (XIII:5)
(Gloss: Ques-we (Nom) indeed-in creation (Obl) new (Obl))
(Lit.: Shall we indeed be in a new creation?)
b. Shall we [indeed] be raised to life again?

Finally, the third empirical observation recorded in paradigm E as in (109e) has demonstrated that all the non-passives in Arabic (be they verbal [+V] or nominal [+N]) which may function as possible canonical passives in English are in fact instances of the dynamic passive type, the concern of sub-paradigm E1 stated in (119a) and the empirical observation recorded in (120a). This indicates that none of these non-passives in Arabic would function as a corresponding instance of the static passive type in English, though the reverse does not hold, as illustrated in sub-paradigm E2 stated in (119b) and the empirical observation recorded in (120b). Accordingly, one can draw the obvious conclusion that if functional divergence exists between Arabic and English in the canonical passive from the viewpoint of the latter language, as it naturally does, then it only exists in the dynamic type of this construction.

2.2 Knowledge symmetry

As discussed earlier, formation of the canonical passive is proposed to result from the 'mental' functioning of a given set of general principles (identified with specific properties of the human mind) as well as the internal setting of the particular parameters involved such as the word order parameter and the [V+Pass] parameter. Accordingly, the set of general principles (which are assumed to synchronize with lexical insertion) would constitute the typological convergence between unrelated languages such as Arabic and English in this construction, since they constitute part of a genetically determined ordinance known as Universal Grammar (UG). Whereas the set of particular parameters would be responsible for the typological divergence in the same construction, as they necessitate the fixing of particular values which may vary from one language to another, given the apparent cross-linguistic variations in morphology and phonology (cf. sections 1.3 and 1.4). This indicates that the intentional production of any natural instance of the canonical passive would reflect the two sorts of the native speaker's internalized knowledge of this construction, viz. linguistic knowledge and pragmatic knowledge, with the former comprising the structural and lexical components and the latter the semantic and logical components as we saw at the outset of the previous section (cf. items (100) and (104)). These two sorts of internalized knowledge are repeated in (123) and (124) for convenience.

(123) **Linguistic knowledge:**
  a. The ***dynamic passive*** requires that the dynamic category (i.e. the direct object or any category standing proxy for it) move to subject position.
  b. The ***static passive*** requires that the static category (i.e. the direct object or any category standing proxy for it) remain in its base position, and that the subject position be occupied by the nominal expletive.

(124) **Pragmatic knowledge:**
  a. Topicalization of patiency (or its syntactic equivalent) in the dynamic passive and impersonalization of agency in the static passive.
  b. Reification of causation in both constructions.
  c. Externalization of agency in both constructions.
  d. Demotion of external agency in the dynamic passive and nonpromotion of internal patiency (or its syntactic equivalent) in the static passive.

Seen as a universal definition of the canonical passive (a definition that seems to be true in all natural languages instantiating this construction), the identification in (123) and (124) would in principle underline the symmetrical balance in the linguistic and pragmatic knowledge that both the native speaker of Arabic and the native speaker of English, for instance, would internalize of the same construction (see also note 22). The establishment of symmetrical balance in such a perspective is nothing to do with whether or not Arabic and English constantly exhibit functional convergence in the natural instances of the canonical passive, where every instance in the former language functions as a corresponding instance in the latter (or vice versa). If the two languages converge, the concern of paradigm C discussed in the preceding section, then both the internalized knowledge of the Arabic canonical passive and the internalized knowledge of the English counterpart would exist in parallel. If, however, the two languages diverge from the viewpoint of Arabic or English, the subject-matters of paradigms D and E respectively, then the internalized knowledge being talked about would not exist in parallel, though still in principle symmetrically balanced (cf. section 2.1).

Recall that there exist only two types of the canonical passive both intra-linguistically and cross-linguistically: the dynamic passive type and the static passive type. Likewise, the establishment of symmetrical balance in internalized knowledge of this construction is nothing to do with whether or not the canonical passives that mark functional convergence between Arabic and English constantly exhibit a one-to-one correlation between the natural instances of either type. For this reason, paradigm C was considered in terms of four sub-paradigms (C1, C2, C3, and C4), with the first two addressing functional homogeneity (dynamic/static passives in Arabic *vs.* dynamic/static passives in English) and the last two addressing functional heterogeneity (dynamic passives in Arabic *vs.* static passives in English, and vice versa). Furthermore, in the case of functional divergence from the viewpoint of Arabic, the universal distinction between the two types also resulted in considering paradigm D in terms of two sub-paradigms (D1 and D2), with the former referring to the dynamic passive type (dynamic passives in Arabic *vs.* non-passives in English) and the latter referring to the static passive type (static passives in Arabic *vs.* non-passives in English). Only in the case of functional divergence from the viewpoint of English did the distinction lead us to consider paradigm E in terms of only one sub-pardigm (E1) due to the sole existence of this functional divergence in the dynamic passive type (dynamic passives in English *vs.* non-passives in Arabic).

Therefore, the symmetrical balance in internalized linguistic and pragmatic knowledge of the canonical passive shown in (123) and (124) as well as the workings of this knowledge should be made clear in the light of the frequency sub-paradigms just mentioned. Suppose that an Arabic-speaking monolingual[28] happens to intentionally produce the Arabic dynamic passive ADP and the Arabic static passive ASP in any relevant context, and that ADP and ASP constantly function as the corresponding English dynamic passive EDP and the corresponding English static passive ESP (the concerns of sub-paradigms C1 and C2 respectively). We would then want to deduce that the English-speaking monolingual (see also note 28), who is exposed to the same relevant contexts, produces EDP and ESP via the utilization of exactly the same linguistic and pragmatic knowledge stated in (123) and (124). That is, the knowledge underlying ADP and ASP would operate in parallel with the knowledge underlying EDP and ESP. In this case, we can identify the nature of the lexical verbs incorporated in either type as in (125) below, given the typological convergence between Arabic and English in the potential dynamicness of the direct and indirect objects and in the potential staticness of the CP-argument within the unmarked situation.

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[28] To maintain the logical succession of the assumptions put forward in this study, the intention of the Arabic-speaking monolingual, or the English-speaking monolingual, for that matter, should be made clear in this respect. By the former I mean, at this point, that he/she has internalized knowledge of the written variety of Arabic, but knows nothing about English (his/her knowledge of any other language is irrelevant here). The same applies to the English-speaking monolingual in that he/she knows nothing about Arabic, and that his/her knowledge of any other language is also irrelevant. In both cases, the monolingual (who is typically a university student) internalizes linguistic

(125) a. **Sub-paradigm C1:** The lexical verb incorporated in **ADP** and **EDP** is either a passivizable transitive verb or a ditranistive verb whose two objects cannot act as a nominal sentence.

b. **Sub-paradigm C2:** The lexical verb incorporated in **ASP** and **ESP** is specifically a ditransitive verb whose two objects can indeed act as a nominal sentence (i.e. the CP-argument itself).

Suppose, on the other hand, that the Arabic-speaking monolingual happens to intentionally produce ADP and ASP in any relevant context, and that ADP constantly functions as a corresponding ESP and ASP constantly functions as a corresponding EDP (the concerns of sub-paradigms C3 and C4 respectively). We would also want to deduce that the English-speaking monolingual, who is exposed to the same relevant contexts, also produces ESP and EDP via the utilization of exactly the same linguistic and pragmatic knowledge stated in (123) and (124). However, the knowledge underlying either type in the two languages would not operate in parallel as in the case of sub-paradigms C1 and C2 discussed above, but rather something like a 'proactive' switch from the knowledge underlying ADP to that underlying ESP and something like a 'retroactive' switch from the knowledge underlying ASP to that underlying EDP would be expected, albeit within the same universal representation of the canonical passive (be it the dynamic type or the static type). In this case, we can also identify the nature of the lexical verbs incorporated in either contrast as in (126) below, given the typological divergence between

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and pragmatic knowledge of the canonical passive construction in the L1 (see, also, note 22).

Arabic and English in the syntactic behaviour of certain categories within a marked situation.

(126) a. **Sub-paradigm C3:** The lexical verb incorporated in the **ADP-ESP** contrast is either a verb subjectivizing a CP-argument (an *ann*-argument) in Arabic (e.g. *awha:* 'to reveal') or a verb embedding an infinitival argument in English (e.g. *decide*).
b. **Sub-paradigm C4:** The lexical verb incorporated in the **ASP-EDP** contrast is either a verb necessitating a PP-argument in Arabic (a less marked case) or a verb subjectivizing a CP-argument (a *that*-argument) in English (e.g. *believe*).

Now if the approach to frequency asymmetry is able to identify the nature of the lexical verbs incorporated in the canonical passives in Arabic that do in fact function as corresponding canonical passives in English, then paradigm C would seems to be the best available criterion for predicting the presence or absence of the one-to-one correlation between instances of either type of the construction under consideration in the two languages, given that there exist only the dynamic passive type and the static passive type. With this caveat in mind, where the four sub-paradigms C1, C2, C3, and C4 address the functional convergence in question from all possible angles, a marginally exceptional situation in which the verb *qa:la* 'to say' in Arabic specifically may assign a different lexical meaning would also be captured, since the same verb may lead to pairs of examples in accordance with sub-paradigm C4 due to the modality or type of *maqu:l al-qawl* 'the object of saying' which determines the lexical meaning of the verb just mentioned as illustrated in (127-128) below. In such a perspectives, the functional convergence between Arabic and English in accordance with paradigm C would certainly have its practical implications, as will be seen in the final section (section 2.4).

(127) a. wa-qi:la uq?udu: ma?a al-qa:?idi:n. (IX:46)
(Gloss: and-was said (he) stay (2plm, Imp) with the-stayers (Obl))
(Lit.: And it was said [to them]: 'Stay with the stayers.')
b. They were bidden to stay with those who stayed behind.

(128) a. … qi:la la-hum ma:tha: anzala rabbu-kum. (XVI:24; XVI:30)
(Gloss: was said (he) to-them (Obl) what revealed (3sm) Lord (Nom)-your)
(Lit.: It was said to them: 'What has your Lord revealed?')
b. … they were asked: 'What has your Lord revealed?'

Furthermore, suppose that the Arabic-speaking monolingual happens to intentionally produce ADP and ASP in any relevant context, and that neither ADP nor ASP functions as a corresponding EDP or ESP (the subject-matters of sub-paradigms D1 and D2, respectively). We would then want to deduce that the English-speaking monolingual, who is exposed to the same relevant contexts, produces constructions that are syntactically different from ADP and ASP (call them 'English non-passive constructions' (ENCs)) via the utilization of linguistic and pragmatic knowledge underlying ENCs. Accordingly, the Arabic-speaking monolingual would be in a position to utilize his/her internalized knowledge of the linguistic and pragmatic aspects of the canonical passive as stated in (123) and (124) above, whereas the English-speaking monolingual would not, even though the same contextual clues that are relevant to either type of this construction are available for the latter. On the basis of this account, we can identify the nature of the lexical verbs incorporated in ADP and ASP as in (129) below, bearing in mind the absence of the one-to-one correlation between the argument structures (and therefore between the theta-roles assigned to the arguments in these argument structures) which are s-selected by certain lexical verbs in Arabic and their English counterparts in accordance with paradigm D.

(129) a. **Sub-paradigm D1:** The lexical verb incorporated in **ADP** is transitive or ditransitive, and entails in the English counterpart the verbalization of a nominal and/or adjectival representation such as those listed in (130) below.
b. **Sub-paradigm D2:** The lexical verb incorporated in **ASP** is phrasalized via a given preposition, and entails in the English counterpart the verbalization of a nominal and/or adjectival representation such as those listed in (131) below.

(130) a. *Rah̲ima* 'to have mercy on someone' or 'to be merciful to(wards) someone'.
b. *waritha* 'to be heir to someone' or 'to be someone's heir'.
c. *t̲awwaqa [bi-]* ' to put something around someone's neck'.
d. *a:t̲h̲a:* 'to cause someone volitionally to suffer harm/hurt'.
e. *ah̲s̲ana* 'to make a woman chaste through wedlock'.
f. *na:da: an* 'to call out to someone saying that'.
g. *ah̲alla* 'to make/declare someone or something lawful for someone'.

(131) a. *at̲h̲ina li-* 'to make/declare something possible for someone'.
b. *ašraka bi-* 'to set up/attribute associates or participants to God'.
c. *ik̲talafa fi:* 'to have/adopt different opinions about/of something' or 'to differ in opinion about/over/on something'.

Now if the approach to frequency asymmetry is able to identify the nature of the lexical verbs incorporated in the canonical passives in Arabic that do not function as corresponding canonical passives in English, then, like the case of paradigm C discussed above, paradigm D would seem to be the most reasonable criterion for predicting the functional divergence between the two languages in either type of this construction from the viewpoint of Arabic, given that this functional divergence exists both in the dynamic passive type (ADPs *vs.* ENCs) and the static passive type (ASPs *vs.* ENCs). With this proviso in mind, where the two sub-paradigms D1 and D2 address the functional divergence in question from both angles, a marginally exceptional situation in respect of either sub-paradigm would also be accounted for. On the one hand, the potential dynamicness of the cognate and adverbial objects in Arabic may lead to pairs of examples in accordance with sub-paradigm D1 regardless of the degree of transitivity (cf. examples (66-68)). On the other, the ditransitivity of the verb *qa:la* 'to say' in Arabic may also result in pairs of examples in accordance with sub-paradigm D2, particularly when the CP-argument is not structurally represented as shown in (123) below. In such a perspective, the functional divergence between Arabic and English in terms of paradigm D would no doubt have its practical implications, as will be seen later (cf. section 2.4).

(132) a. wa-qi:la ya: arḏu. (XI:44)
(Gloss: and-was said (he) O earth (Nom))
(Lit.: And it was said [as a voice]: 'O earth'.)
b. A voice cried out: 'Earth, ...

Conversely, suppose that the English-speaking monolingual happens to intentionally produce EDP and ESP in any relevant context, and that EDP, but not ESP, does not function as a corresponding ADP or ASP (the concern of sub-paradigm E1 specifically, since no ESP does not function as a corresponding ASP or ADP). We would then want to deduce that the Arabic-speaking monolingual, who is exposed to a context identical to that of EDP, produces a construction that is syntactically different from EDP (call it an 'Arabic non-passive construction' (ANC)) via the utilization of linguistic and pragmatic knowledge underlying ANC. Accordingly, unlike the case of sub-paradigms D1 and D2 discussed above, the English-speaking monolingual would be in a position to utilize his/her internalized knowledge of the linguistic and pragmatic aspects of the canonical passive (viz. the dynamic passive type specifically) as stated in (123) and (124) above, whereas the Arabic-speaking monolingual would not, even though the same contextual clues that are relevant to this type are available for the latter. On the basis of this account, we can identify the nature of the lexical categories incorporated in ANC as in (133) below, given that ANC may mark verbalization [+V] or nominalization [+N] in accordance with sub-paradigm E1.

(133) **Sub-paradigm E1:**

a. [+V]: The lexical category incorporated in **ANC** is a verbal representation which does not assign an external theta-role, and requires in the English counterpart a verbal representation that is dynamically passivized such as those listed in (134) below.

b. [+N]: The lexical category incorporated in **ANC** is a nominal representation which derives from a cognate verb, and requires in the English counterpart a verbal representation that is dynamically passivized such as those listed in (135) below.

(134) a. *tamma* (**Resultative**) *vs.* 'to be completed'.
b. *h̲aqqa* (**Resultative**) *vs.* 'to be fulfilled'.
c. *taqat̲t̲a?̲a* (**Reflexive**) *vs.* 'to be cut/broken'.
d. *ihtada:* (**Reflexive**) *vs.* 'to be guided'.
e. *iswadda* (**Reflexive**) *vs.* 'to be blackened'.

(135) a. *mawru:d* (**Nomen Patientis**) *vs.* 'to be led to'.
b. *na:jin* (**Nomen Agentis**) *vs.* 'to be freed'.
c. *k̲alq* (**Verbal Nominal**) *vs.* 'to be created/raised to life'.
d. *subh̲a:na* (**Cognate Object**) *vs.* 'to be exalted'.

Likewise, if the approach to frequency asymmetry is able to identify the nature of the canonical passives in English that do not function as corresponding canonical passives in Arabic, then, like the case of paradigms C and D discussed above, paradigm E would also seem to be the most plausible criterion for predicting the functional divergence between the two languages in the dynamic passive type of this construction from the viewpoint of English, given that the functional divergence being talked about exists only in this type. With this proviso in mind, where sub-paradigm E1 specifically addresses the functional divergence between the two languages from this sole angle (EDPs *vs.* ANCs), a seemingly marked situation in which transitive verbs such as *la?̲ana* 'to curse' in Arabic in particular assign an external theta-role would also be captured, since the same verbs may lead to pairs of examples in accordance with the same sub-paradigm owing to the topicalization of the patientive NP within a defining relative clause (cf. examples (121)). In such a perspective, the functional divergence between Arabic and English in accordance with paradigm E (i.e. sub-paradigm E1 only) would also have its practical implications, as will be seen later (cf. section 2.4).

Having illustrated the symmetrical balance in internalized linguistic and pragmatic knowledge of the canonical passive and how this knowledge operates within the functional boundaries of each of the frequency paradigms and sub-paradigms, it appears that the ability of the approach to frequency asymmetry to identify the nature of the lexical verbs as well as some other derived nominals in the sense discussed above may well serve as a fruitful prerequisite for giving priority to certain instantiations of the construction in question over others within a logical order of L2 teachability. To the extent that the learnability of a particular construction within the L2 acquisition framework is in principle determined by the 'determinism' of its learnability within the L1 acquisition framework,[29] such an order will address both the Arabic-speaking monolingual and the English-speaking monolingual when either monolingual happens to be an L2 learner of the other monolingual's L1, given the prior internalization of linguistic and pragmatic knowledge of the canonical passive in the L1 (see also note 28).

However, determinism of 'determinism' in the sense intended here does not necessarily mean that the logical order of teachability in respect of the canonical passive in the L2 is in constant conformity with the natural order of its learnability in the L1. In any event, a final and complete description of the latter order has not yet been established in the literature of L1 acquisition research, as will be seen in the next section (section 2.3). Therefore, the fact that both the Arabic-speaking learner of English and the English-speaking learner of Arabic have already internalized linguistic and pragmatic knowledge of the canonical passive in the L1 seems to be at this point the only reasonable starting-point for determining the logical order of the teachability of the same construction in the L2. Hence, we can only claim in this connection that, whether or not the logical order of L2 teachability is constantly identical with the natural order of L1 learnability, the former order may start at a particular stage of acquisition where the latter order ends, provided that the L2 learner's tendency to draw on his/her past experience (where internalized knowledge of the L1 occupies a central position) can be taken as axiomatic.

It follows from the above that, with regard to the L2 learner's inevitable tendency to draw on his/her past experience, we can speak of at least two kinds of state of knowledge within this experience when his/her acquisition of the canonical passive in the L2 is not yet deterministic (see note 29). The first kind refers to the steady state of the L2 learner's internalized knowledge of his/her L1, a state which includes his/her linguistic and pragmatic knowledge of the canonical passive in the L1 as illustrated in (123) and (124) at the outset of this section. In this steady state, the principles and parameters which give rise to the formation of this construction in the L1 already exist, and are therefore instantaneously available for utilization at any point in time. The second kind refers to the unsteady state of the L2 learner's 'externalized' knowledge of the L2 he/she is learning, 'externalized' in the sense that it is attained after the attainment of the steady state in L1 acquisition, since the steady state in L2 acquisition is difficult to define (cf. Cook and Newson, 1996, p.125). In this unsteady state, the linguistic and pragmatic knowledge underlying the canonical passive in the L2 may or may not exist, but the principles and parameters which give rise to the formation of this construction in the L2 are not yet instantaneously available for utilization at any point in time. For ease of exposition in the upcoming sections, let us call the first kind of state of knowledge in L1 acquisition (**SKn1**) and the second kind of state of knowledge in L2 acquisition (**SKn2**).

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[29] By 'determinism' I mean that the process of L1 acquisition is, empirically speaking, both non-erroneous and efficient in normal language situations, even though this process may presuppose some necessary 'deviancies' from the viewpoint of the standard norm of the L1 such as overgeneralizations. In the normal course of events, the L1 acquirer is confronted with a very restricted number of options in constructing his/her grammar. Determinism, in this sense, stands in contrast with what is known as 'hypothesis-testing', where a large number of options (i.e. hypotheses) are assumed to be available in language processing, and therefore an accumulative occurrence of 'feedback' (i.e. correction of ungrammatical sentences) would be expected (see, for example, Borer and Wexler, 1987, p.131). By the same token, the persistence of systematic rather than unsystematic error-making in the process of L2 acquisition simply indicates that this process is not yet deterministic.

Given the L2 learner's SKn1 and SKn2 (notice that his/her state of knowledge of any other language is irrelevant in this context (see note 28)), the logical order of teachability in respect of the canonical passive in the L2 will essentially be considered with reference to two manageable dimensions as well, regardless of the manner in which the natural order of the learnability of this construction is fixed in the L1. Firstly, the **intrinsic dimension**, where the derivational history of the canonical passive in the sense discussed in part 1 will be taken into account, simply because this history presupposes background linguistic and pragmatic knowledge of the active version of the same construction, knowledge that the L2 learner is assumed to already possess in his/her SKn2 (be it conscious or subconscious). Secondly, the **extrinsic dimension**, where the functional convergence and divergence between Arabic and English in the canonical passive will be accounted for in terms of the frequency paradigms and subparadigms discussed above. Therefore, the extrinsic dimension, in turn, presupposes the intrinsic dimension and assumes that the L2 learner is at a stage of language development where he/she attains a fairly acceptable quantum of L2 syntax, thus enabling him/her to have full control over the derivational history of the construction under consideration in his/her SKn2.

It now becomes evident that the intrinsic and extrinsic dimensions will in one form or another determine the logical order of teachability in respect of the canonical passive in the L2, whatever the approach the language teacher may adopt to L2 teaching (be it a structuralist approach, a communicative approach, or a mixture of both). Again, whether or not this order of teachability is compatible with the natural order of the learnability of the same construction in the L1 does not seem to have significant bearing on the logicality of the former order. If the two types of order exhibit a one-to-one correlation, then so be it. In this case, the order of L2 teachability will be as natural as the order of L1 learnablity on the one hand, and the latter order will be as logical as the former order on the other. If, in any possible world, the two types of order do not exhibit a one-to-one correlation, then the attained knowledge of the canonical passive would certainly have followed a different route of learning in either context. But, in any event, the learning of a given construction also presupposes some sort of knowledge of the linguistic units which interact for the formation of this construction, since one would not expect a child to learn, for instance, the four basic arithmetical processes (addition, subtraction, multiplication, and division) without learning how to count with numbers indefinitely.

By analogy, the intrinsic (i.e. derivational) dimension of the canonical passive (or any other construction, for that matter) enables the L2 leaner to compute with linguistic units indefinitely, be they lexical categories or functional (i.e. grammatical) categories, and therefore to construct a meaningful (i.e. communicable) sentence out of such units as an instance of such a construction. In addition, this dimension also enables the L2 learner to recognize which syntactic categories are potentially dynamic and which are constantly static for the formation of the dynamic and static passive types respectively. From this standpoint, to continue the order of L2 teachablility with reference to the extrinsic (i.e. functional) dimension of the same construction[30] will not prove to be effective in an L2 learner until the requirements of the intrinsic dimension have already been learnt effectively. Hence, the extrinsic dimension will, in turn, be sub-ordered in terms of the frequency paradigms and subpardigms discussed above, since the order of L2 teachability, to reiterate, addresses both the Arabic-speaking learner of English and the English-speaking learner of Arabic.

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[30] The term *functional* in the use of 'functional categories' should not be confused with the same term in the use of 'functional dimension'. Functional categories, as we saw earlier, are almost purely grammatical units which are defective in their lexical properties such as Agr, Tns, Pass, etc. (cf. section 1.4). Whereas the functional dimension of a given construction simply indicates how this construction functions both intra-linguistically and cross-linguistically (cf. section 2.1).

With the identification of the intrinsic and extrinsic dimensions of the canonical passive, it appears that what the L2 learner's SKn1 and SKn2 have in common is at least the background linguistic and pragmatic knowledge of the active construction, meaning that he/she is at a stage of L2 learning where a fairly acceptable quantum of L2 syntax is already attained. It is therefore this fairly acceptable quantum of L2 syntax that is essential for the order of teachability in respect of the canonical passive in the L2. Because the principles and parameters underlying the formation of this construction are instantaneously available for utilization at any point in time in the SKn1 (but not in the SKn2 at this stage), the order of L2 teachablilty within the extrinsic dimension should place particular emphasis on the priority of those canonical passives in the L1 that do in fact function as corresponding canonical passives in the L2, or vice versa (i.e. the concern of paradigm C within the hierarchy of its subparadigms) as will be seen later (cf. section 2.4). In this case, the canonical passives in the L1 may well act internally as filtering devices, given the establishment and simplification of most crosslinguistic congruencies between L1 and L2 in the comprehension process (see, for example, El-Marzouk, 1998a). For reasons which are to do mainly with this inescapable interaction between L1 and L2 the next section (section 2.3) will consider some of the insights put forward into the learnablility of the canonical passive within the L1 acquisition framework, whereas the final section (section 2.4) will highlight the logical order of teachablility in respect of the same construction within the L2 acquisition framework. Accordingly, in the former section the discussion will be confined to the intrinsic and extrinsic dimensions of the canonical passive with reference to the first kind of state of knowledge SKn1, and in the latter section the two dimensions of the same construction will be taken into account in relation to the second kind of state of knowledge SKn2.

2.3 L1-passive learnability

Theoretical approaches to the study of learning as a general principle date back to seventeenth-century philosophy, especially to the philosophy of Descartes (1596–1650), whose speculations on the dichotomization between mind and matter (i.e. his version of dualism within an innatist or nativist framework) in turn had their roots in the philosophy of Ibn Sina (980–1037), or Avicenna as he is known in the Western humanities. Since then philosophers as well as psychologists have viewed the general principle of learning as a human phenomenon which entails one, or more, of the biological processes and sub-processes occurring inside the human body. These biological processes and sub-processes construct an unknown array of internal 'mediators' that are both necessary and crucial for the survival of the human species. Experimental approaches to the general principle of learning draw essentially on scientific research into the evolution of intelligence, comparative cognition, neurophysiology, and animal models of human behaviour. However, despite the fact that investigations into these brands of knowledge have gained considerable momentum, a universally acknowledged definition of learning does not seem to exist as such. The only thing that biologists, neurophysiologists, psychologists, etc. can say about this principle is to explain it in terms of enduring changes in the *mechanisms* of human behaviour, since non-enduring changes in the behaviour itself do not, and will not, reflect learning. It is, therefore, these enduring changes in the mechanisms of human behaviour which would comprise what is known as 'developmental changes' and 'environmental changes', the former changes occurring inside the human body and the latter changes outside it (see El-Marzouk, 1998a, for further detail).

Similarly, in the field of L1 acquisition, linguists can only identify the principle of language learning with enduring changes in the mechanisms of linguistic behaviour, and the volume of research into this sort of behaviour is awe-inspiring. In one of their interpretations within an innatist framework, the developmental changes just mentioned are somehow meant to be the physical or organic changes which result in at least one total instantiation of Universal Grammar (UG), given the assumption that this ordinance is "part of the genotype specifying one aspect of the initial state of the human mind and brain" (Chomsky, 1980, p.82). Furthermore, the environmental changes that occur outside the human body are often accounted for in terms of triggering experience and the nature of the evidence available to the child for fixing the language-specific value of a particular parameter. If, for example, a child is brought up in an Arabic or English speech community, then the verbal or nominal value of the [V+Pass] parameter respectively will be fixed in the course of language learning (cf. section 1.4, item (86)). In this case, the child is encountering what is known as 'positive evidence'. If, in any circumstances, the child receives feedback (i.e. correction of ungrammatical sentences (cf. note 29)), then he/she is encountering what is called 'direct negative evidence', with 'indirect negative evidence' referring to the usual non-occurrence of ungrammatical sentences in the speech community (cf. Chomsky, 1980, p.33; Chomsky, 1981, pp.8f.; Chomsky, 1988, p.134; Cook and Newson, 1996, pp.90f.).

Enduring changes in the mechanisms of linguistic behaviour would, therefore, lead to the attainment of what we have already referred to as SKn1, a language continuum which spans the progression of acquisition from an initial or unsteady state of knowledge to a final or steady state of knowledge, the latter exhibiting linguistic changes only marginally. In this respect, Chomsky makes a distinction between what he calls **'internal-language'** (**I-L**) and **'external-language'** (**E-L**), a distinction that may explain the possible difference between children and parents in these enduring changes. An I-L is assumed to be a property of the mind/brain of the speaker/hearer who knows and uses the language in normal conditions. As such, it is an 'individualized' entity that is acquired by such a speaker/hearer. An E-L, on the other hand, is understood to be independent of the mind/brain, and constitutes a 'collectivized' entity of actions or linguistic forms which are associated with a given group of speakers/hearers (cf. Chomsky, 1986a, pp.19f.). In the light of this distinction, the natural order of L1 acquisition within one speaker/hearer would look like (136a) below, where I-L is prioritized to E-L. This means that child language may differ from parent language, simply because the I-L of the former does not have direct access to the I-L of the latter as shown in (136b) below. Consequently, the E-L of a given speaker/hearer can only be perceived as a 'diachronic mediator' between I-L (Parent) and I-L (Child).[31]

(136) a. [**I-L** (Speaker/Hearer) → **E-L** (Speaker/Hearer)]
b. [**I-L** (Parent) → **E-L** (Parent) → **I-L** (Child) → **E-L** (Child)]

The constant recurrence of this natural order within two diachronic phases of a particular natural language (say, Old English and Contemporary English) would underlie, for instance, the disappearance of the preposition *from* which is incorporated to denote agency in the canonical passive construction and the gradual development of the preposition *by* out of the bound morpheme *be-* (cf. note 27), a matter that does not concern us here. What is relevant is that, in normal language situations, the transition from I-L (Parent) to I-L (Child) through the 'diachronic mediation' of E-L (Parent) within two generations of the same speech community does not usually reflect a principled difference in the syntactic domain of SKn1, though it may in other linguistic domains. In these language situations, the child receives positive evidence mainly from parents (their E-Ls), thereby setting basically the same values of the parameters already set by parents.

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[31] On the basis of essentially the same order illustrated in (136), several attempts have been made to explain language change diachronically, a matter that is beyond the scope of this study (cf. Andersen, 1973; Lightfoot, 1979; Roberts, 1992; Jarad, 1997).

However, the intricate problem is that the child, who is progressing towards the attainment of SKn1, does not instantaneously fix the value of a given parameter as soon as he/she meets the positive evidence which instantiates this parameter. The process of parameter setting requires an unknown time-lag between I-L (Parent) and I-L (Child) in the context of (136) above. Thus, the absence of instantaneous parameter setting may be ascribed to the nature of the linguistic evidence itself (where certain constructions are less frequent than others), or to some unfolding extra-linguistic capacity such as memory (where the ability to handle long and complex constructions is still developing), or even to some other factors which are still not fully understood in the literature. In this respect, two conflicting hypotheses have been enunciated within an innatist framework: first, the '**continuity hypothesis**' (Pinker, 1984); and second, the '**maturation hypothesis**' (Borer and Wexler, 1987). In a sense, these two hypotheses reflect the traditional distinction between 'non-growth theory' and 'growth theory' respectively (cf. Chomsky, 1987). A brief account of either hypothesis as well as its treatment of the learnability problem of the canonical passive in the L1 will be presented in turn.

(i) The continuity hypothesis

Generally speaking, the continuity hypothesis claims that the set of UG principles which the child possesses at birth are constant and unchanging in the course of L1 development. Given the assumption that the process of L1 acquisition is fundamentally a process of fixing the particular values of certain parameters (cf. Chomsky, 1988, p.134), the continuity hypothesis also considers the learning process in this context to be constant and unchanging for the most part. Whether or not the set of UG principles contained in the child's grammar are in constant conformity with those instantiated in the L1 he/she is learning (i.e. the target L1) is yet to be explained in precise terms: while the strong version of the continuity hypothesis underlines the necessity of this conformity from the initial state to the final state for the attainment of SKn1, the weak version does not seem to capitalize on a one-to-one correlation (cf. Weissenborn *et al.*, 1992). In either version, however, the conjunction of a fixed set of UG principles (which are in principle linguistic abilities) and a target L1 that is not completely fixed implies that any new material of this L1 which enters into the learning process would have to be learnt. That is, the continuity of learning would simply be identified with the enduring changes in the mechanisms of linguistic behaviour referred to above.

According to any theory of L1 acquisition that is in line with the continuity hypothesis, the child learns a given construction in the L1 simply because he/she encounters this construction in the evidence (the linguistic input) over an unknown period of time. This is nothing to do with whether or not the particular values of the parameters that exist in the child's grammar are already symmetrical with the particular values of the parameters that underlie the formation of that construction, as the strong version and the weak version would affirm, respectively. If the particular values in either case are symmetrical with each other, then the continuity of learning would not be interrupted by linguistic factors (though interruption may be caused by extra-linguistic factors, a very different matter). If, however, the particular values are not symmetrical, then the learning process would take a different route (i.e. switching from one particular value of a given parameter to another) in order to continue. In both cases, an enduring change in the mechanisms of linguistic behaviour would be established.

It seems, at first glance, that the strong version may entail the sole possibility that the child's grammar is equally prepared for, for instance, the two values of the [V+Pass] parameter (verbal and nominal), meaning that either value would be fixed in the course of L1 development. Thus, the L1 acquirers of Arabic and English would follow different routes towards the acquisition of the canonical passive, a construction that is parameterized across languages in terms of the two values being talked about (cf. section 1.4). But the weak version, on the other hand, may entail two further possibilities in this connection. First, the child's grammar initially assumes a **verbal** value for the [V+Pass] parameter as in languages such as Arabic. Accordingly, the L1 acquirer of Arabic would set the same value from the start and the L1 acquirer of English would switch to the nominal value. Second, the child's grammar initially assumes a **nominal** value for the [V+Pass] parameter as in languages such as English. In this case, the L1 acquirer of Arabic would switch to the verbal value and the L1 acquirer of English would set the same value (see, also, Chomsky, 1986a, p.146; Cook and Newson, 1996, p.111). It appears, therefore, that, given the unchanging set of linguistic abilities, no specific restriction would be enforced on the ordering of linguistic input, whether this ordering is considered to be intrinsic or extrinsic as stated in (137) and (138).

(137) **Intrinsic ordering:**

a. Given two constructions X and Y such that X creates a derivational basis for Y.

b. Given such X and Y, Y applies iff X has already applied.
c. For any such X and Y, Y is learned iff X has already been learned.

(138) **Extrinsic ordering:**
a. Unmarkedness is prioritized to markedness.
b. Construction X is unmarked with respect to construction Y.
c. Therefore the learning of X is prioritized to the learning of Y.

Taking into account the intrinsic (i.e. derivational) dimension of the canonical passive construction in the sense discussed in the preceding section, the first kind of linguistic-input ordering stated in (137) would no doubt offer a straightforward description of the natural order of L1 learnability in respect of this construction even if its structural output is viewed cross-linguistically, be it within Arabic or within English. From a derivational perspective, the ordering ensures that a passivizable active construction (construction X in this case) must be learned before the canonical passive version (construction Y), simply because the former creates a derivational basis for the latter. This ordering seems to be true even if current linguistic theory treats a given construction as a syntactic phenomenon rather than a grammatical rule (an artefact), since the Pass element tends to be systematically attached to the active verb, not any other lexical category (cf. section 1.4, note 17). As a consequence, the canonical passive form of the verb can only apply (and, therefore, be learned) if the active version has already applied (and, therefore, been learned) (cf. (137b-c)).

Now, taking into account the extrinsic (i.e. functional) dimension of the canonical passive construction (see, also, note 30), the second kind of linguistic-input ordering stated in (138), on the other hand, does not seem to offer a clear-cut picture of the natural order of L1 learnability in respect of this construction when markedness is identified with frequency asymmetry across languages (that is, construction X is unmarked with respect to construction Y, simply because X is more frequent than Y). If the two variables X and Y are taken as representatives of the two values of the [V+Pass] parameter (verbal and nominal), then the canonical passive construction in English would be unmarked with respect to the Arabic counterpart due to the much higher percentage of the former than that of the latter as illustrated in paradigms A and B earlier (cf. section 1.2, items (108a-b) and (109a-b)). Yet, this seemingly obvious conclusion would not demonstrate the fixed order in which either value is set in the course of language development.[32] If, however, the two variables X and Y are taken as representatives of the two types of the canonical passive construction (the dynamic type and the static type), then the extrinsic ordering in (138), together with the intrinsic ordering in (137), may well be exploited fruitfully for the logical order of teachability in respect of this construction in the L2, as will be seen in the next section (section 2.4).

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[32] The idea of markedness in this sense comes from studies into simple parameters such as the *pro*-drop parameter, which have shown that the [+*pro*-drop]

According to the proponents of the continuity hypothesis, the latter condition for the extrinsic ordering in (138) appears to be the intended condition for L1 learnability in the universal sense. However, the two variables X and Y are not taken as representatives of the two types of the canonical passive construction (dynamic and static), but two types of lexical verbs (viz. kinetic and non-kinetic) incorporated in the dynamic passive type specifically (the 'personal' passive in their jargon). Thus, empirical research into this contrast claims to have shown that children at a certain age are much better at comprehending and producing dynamic passives which involve kinetic verbs (e.g. *comb*, *tear*, etc.) than dynamic passives which involve non-kinetic verbs (e.g. *like*, *see*, etc.). Valid or not, this means that, in English, examples such as *The doll was combed/torn* are likely to be learned earlier than examples such as *The doll was liked/seen*, as the former examples are much more frequent (i.e. unmarked) in the linguistic input to child language than the latter (cf. Maratsos *et al.*, 1983; Pinker, 1984).

To generalize this empirical observation across all the natural languages instantiating the canonical passive construction may not seem to be unwarranted if these languages happen to instantiate the dynamic passive type only. However, even in relation to the unmarked case with kinetic verbs, empirical research into the contrast between short and long passives (i.e. agentless *vs.* agentive passives, respectively), a further instantiation of the two variables X and Y in (138), is both misleading and contradictory, given the unmarkedness of the former with respect to the latter, as we have seen throughout (see, also, note 27). On the one hand, the proponents of the continuity hypothesis observe that both short and long passives (e.g. *The doll was combed/torn* vs. *The doll was combed/torn* ***by Mary***) occur at roughly the same stage of child-language development, an empirical observation which dose not substantiate the extrinsic

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value is unmarked (Italian, Spanish, etc.) with respect to the [-*pro*-drop] value (English, French, etc.), meaning that the acquisition of the former precedes the acquisition of the latter (see, for example, Hyams, 1986). This order of acquisition has recently been explained in terms of morphological uniformity which licences the [+*pro*-drop] value, a matter that is beyond the scope of this study (cf. Hyams, 1992, p.262; Cook and Newson, 1996, pp.287f.).

ordering stated in (138) above (cf. Maratsos, 1983; Maratsos *et al.*, 1983; Pinker *et al.*, 1987). On the other, the proponents of the maturation hypothesis, who claim to offer a different interpretation of linguistic-input ordering, contend that short passives in general are learned before long passives, a seemingly logical contention which does substantiate the same extrinsic ordering in (138) above (cf. Borer and Wexler, 1987, p.133), even though the whole hypothesis may not prove to be tenable as will be discussed presently.

(ii) The maturation hypothesis

In contrast with the continuity hypothesis, the maturation hypothesis does not assume that the set of UG principles possessed by the child in his/her grammar are constant and unchanging through L1 development, but suggests rather that certain principles mature after the initial state of SKn1 like many aspects of the brain which develop after birth. Maturation of certain principles in this perspective means, therefore, that these principles are not instantaneously available for utilization at certain stages of L1 development, but they are at later stages, since other instances of biological maturation take time to develop. As such, the set of UG principles are neither learned nor dependent for their maturation on the child's exposure to the evidence (the linguistic input). Rather, the mechanisms underlying maturation itself 'trigger' the instantaneous availability of these principles at different stages of L1 development. On this account, 'triggering' is to be contrasted with 'learning', and the qualitative changes in the mental make-up of the L1 acquirer would underlie the maturation of UG principles which would, in turn, reflect the enduring changes in the mechanisms of linguistic behaviour referred to above (cf. Borer and Wexler, 1987, pp.124f.).

According to Borer and Wexler who argue in favour of the maturation hypothesis, the child learns nothing from the linguistic input; it is the matured principles that control his/her linguistic output. For this reason, the hypothesis imposes heavy restrictions on the ordering of the linguistic input: 'staggered' control over a given construction is not ascribed to its markedness with respect to other constructions (be it in the intrinsic or extrinsic sense), but to the 'staggered' maturation of the principles which underlie its formation. Yet, this contention entails the possibility that L1 development would even be accounted for in learning situations where the linguistic input is constant and unchanging. In a counter-argument, Weinberg has pointed out that the contention also duplicates the presence of a set of principles which are uniform at all stages of L1 development, a uniformity that is characteristic of the continuity hypothesis, though the 'staggered' maturation being talked about may prevent these principles from utilization at some stages (cf. Weinberg, 1987, pp.174f., fn.5). Thus, whether or not the maturation hypothesis is correct in its interpretation of the 'natural ordering' of the linguistic output has nothing to do with the problem of learnability in respect of a given construction, even if an *ad hoc* statement about the intrinsic and extrinsic orderings of the linguistic input stated in (137) and (138) above is tacitly made in one form or another, as will be seen presently.

But Borer and Wexler still insist on accounting for the learnability problem of the canonical passive construction in the L1 (in their data, English and Hebrew as L1s) in 'maturational' terms. First of all, they concentrate on the development of the dynamic passive type (the 'verbal' passive in their jargon) and say nothing about the development of the static passive type, given at least the native speaker's internalized linguistic knowledge of canonical passivization as a unified syntactic phenomenon, as restated at the outset of section 2.1 (cf. item (100)) and repeated at the outset of section 2.2 (cf. item (123)). Accordingly, their 'maturational' interpretation of the development of the dynamic passive type runs as follows (notice that we are simplifying in the light of the new terminology arrived at): At a certain stage of L1 development, the child cannot produce instances of the dynamic passive, but can only produce instances of the 'adjectival passive' (which is one of at least two types of the noncanonical passive construction that does not mark verbalization [+V], the other being the 'nominal passive' (cf. note 17)), even though both constructions (especially in English) require the same measure of morphological complexity, the 2-morph representation (cf. section 1.4).[33] To support their caveat, they cite examples of either construction as in (139) (cf. Borer and Wexler, 1987, pp.141f.).

(139) a. *The island was uninhabited* [ ]

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[33] According to Borer and Wexler, evidence for the priority of adjectival passives over dynamic passives is also found in Hebrew, where the two constructions exhibit different morphological properties (cf. Borer and Wexler, 1987, pp.136f.). In Hebrew (or in Arabic, for that matter) the canonical passive form marks verbalization [+V] and reflects both Tns-features and Agr-features, the latter including Person, Number and Gender as in (ia) below. On the other hand, the adjectival passive form (the nomen patientis) marks nominalization [+N] and reflects only Agr-features which include only Number and Gender as in (ib).

(i) a. *surriẖa* (Arabic)/*sura:k* (Hebrew) 'to be combed' [+V (3sm)]
b. *musarraẖ* (Arabic)/*mesura:k* (Hebrew) 'combed' [+N (sm)]

b. *John was hit* [*t*]

Here, in the derivation of adjectival passives such as (139a) no movement of an internal argument is invoked (hence the absence of any trace in the square brackets [ ]), whereas the derivation of dynamic passives such as (139b) requires the movement of a dynamic category from its base position, the trace *t*, to subject position, as we have seen throughout. For this reason, Borer and Wexler claim that the acquisition of the former construction precedes that of the latter in L1 development as NP-movement mechanisms are not available to the child in his/her grammar at a certain stage (i.e. they are not 'matured'), though simpler mechanisms such as WH-movement are possible at that stage. Given the same measure of morphological complexity both in the adjectival passive and the dynamic passive, the distinction is thus explained in terms of the distinction between lexical rules and syntactic rules respectively (see also Gleitman, 1982; Radford, 1990 for a similar sort of argumentation). If this contention were true, then the static passive type, which does *not* involve any movement mechanisms would also precede the maturation of NP-movement mechanisms (or even WH-movement mechanisms), a very significant matter which is entirely overlooked in their analysis (cf. Borer and Wexler, 1987, p.149).

Moreover, in the short versions of dynamic passives observed in the child's grammar such as those cited earlier (e.g. *The doll was combed/torn* vs. *The doll was liked/seen*), the distinction between kinetic verbs and non-kinetic verbs, Borer and Wexler argue, corresponds to a valid distinction in the adult's grammar. Because these dynamic passives are potentially ambiguous between a verbal reading and an adjectival reading, it turns out that the verbal reading which is excluded in the child's grammar is exactly the same reading which is never homophonous with the adjectival reading in the adult's grammar. To Borer and Wexler, this would explain why the acquisition of dynamic passives with kinetic verbs is prior to that of dynamic passives with non-kinetic verbs, since the lexical rules for deriving the latter are missing from the child's grammar. Hence, in the adult's grammar kinetic verbs would seem to make 'good' adjectives as in (140a) below, whereas non-kinetic verbs would not as in (140b), unless improved by further affixation such as *un-* in (140c) (cf. Borer and Wexler, 1987, pp.135f., fn.2).

(140) a. The doll appears ***combed/torn***; the ***combed/torn*** doll;
b. * The doll appears ***liked/seen***; * the ***liked/seen*** doll;
c. The doll seems ***unseen***; the ***unseen*** doll.

Under this analysis, it would appear that, in the adult's grammar of

English in general, adjectival passives, which do not involve movement of an internal argument as illustrated in (139a) above, are restricted by a semantic condition on canonical-adjective formation (e.g. *The island was large*). It is, therefore, imperative that this semantic condition rule out adjectives which are constructed out of non-kinetic verbs such as (140b), except when these adjectives inherit the same condition from further affixation like *un-* as in (140c). Given that the argument-structure change associated with canonical-adjective formation is identified with the 'deletion' of the external argument (the Agent specifically), it follows that adjectival passives never occur with an agentive PP. To Borer and Wexler, this would also explain the priority of short passives over long passives in L1 development, since constructions which reflect an adjectival-passive reading unambiguously do not normally admit of an agentive PP as in (141) below (cf. Borer and Wexler, 1987, p.136).

(141) a. The uninhabited island (***by Peter**);
b. The closed door (***by Peter**);
c. The torn doll (***by Peter**).

Although this analysis seems at first glance to be consistent with a maturational framework (an analysis that seems to enable the researcher to make conceptual predictions of certain facts about the learnability problem of the canonical passive construction in the L1), a closer investigation of the cited examples in Borer and Wexler's data will demonstrate that these conceptual predictions result in erroneous empirical predictions. As mentioned above, the observation that both short and long passives are learned at roughly the same stage of L1 development (an observation pointed to by the proponents of the continuity hypothesis) simply indicates that the agentive PP is necessarily deleted when deleted and it is necessarily inserted when inserted at that stage. The predominance of the production of short passives according to the observation on which Borer and Wexler base their maturational analysis may well result from the unmarked deletion of the agentive PP as discussed throughout, or even from extra-linguistic constraints on sentence length in production rather than perception (cf. Weinberg, 1987, p.185, n.9). But to identify the argument-structure change arising from unambiguous adjectival-passive formation with the deletion of the external argument exclusively as in (141) is in fact to impose a further structural condition on the formed passive adjective which does nothing but delete the external argument. The fact that unambiguous adjectival passives such as (141) do not accept an agentive PP is simply attributed to the attributive use of the formed passive adjective, where it is located in pre-nominal position. On the other hand, similar constructions may well accept an agentive PP within the predicative use of the formed passive adjective, where it is located in post-nominal position as in (142) below, meaning that the necessary insertion of an agentive PP cannot be reduced exclusively to the syntactic rule associated with canonical-passive formation. The following examples are cited from Weinberg (1987, p.177).[34]

(142) a. The island was uninhabited ***by civilized people***, but linguists like to live there.
b. The problem was unsolved ***by any linguist*** until Amy came along and licked it.

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[34] It is worth noting here that, given the morphological difference between the canonical passive form and the adjectival passive form of the verb in Hebrew or Arabic as shown in note 33 above, the examples of either form which Borer and Wexler cite from Hebrew as in (i) and (ii) below are also quite dubious. They claim that only in the canonical passive construction (the dynamic passive type in this case) is the insertion of an agentive PP permitted, hence the grammaticality of (ia) and the ungrammaticality of (iia), while in fact both sound fine to the native speaker's ear (cf. Borer and Wexler, 1987, pp.136f.).

(i) a. ha-yeled sura:k (***ʔ̲al-yeday imm-o***). (Dynamic passive)
(Gloss: the-boy was combed (3sm) on-hands mother-his)
(Lit.: The boy was combed (Pass) ***on the hands of his mother***.)
b. The boy was combed (***by his mother***).

(ii) a. ha-yeled haya: mesura:k (****ʔ̲al-yeday imm-o***). (Adjectival passive)
(Gloss: the-boy was combed (3sm) on-hands mother-his)
(Lit.: The boy was combed (Adj) ***on the hands of his mother***.)
b. The boy was combed (***by his mother***).

Furthermore, the possibility of inserting an agentive PP in the adjectival passive construction as in (ii) is not only acceptable in Arabic but also grammatical from the viewpoint of the Koran as in (iii) below, where the verb *arsala* 'to send forth' yields its canonical passive form and adjectival passive form as in *ursila* 'to be sent forth' [+V] and *mursalun* 'sent forth' [+N] respectively, the latter being the nomen patientis itself (cf. example (135a)).

(iii) a. inna s̲a:lih̲an mursalun ***min rabbi-hi***. (VII:75)
(Gloss: Saalih sent forth (3sm) from Lord-his)
(Lit.: Saalih is sent forth (Adj) ***from his Lord***.)
b. Saalih is sent forth ***by his Lord***.

It may well turn out that, in contrast with Borer and Wexler's account, the lexical rule associated with adjectival-passive formation in Arabic as in (iii), or in Hebrew as in (ii), or even in English as in (142) in the text internalizes (i.e. renders an external argument internal) rather than deletes the external argument.

Now, returning to the examples cited in (140) above, adjectival-passive formation is, according to Borer and Wexler, restricted to kinetic verbs as in (140a), since non-kinetic verbs do not undergo the lexical rules associated with this formation as in (140b), unless improved by further affixation like *un-* as in (140c). However, the criterion for this restriction is based on whether the formed passive adjective can be used attributively in pre-nominal position or predicatively in post-nominal position as the complement of copular verbs such as *appear* and *seem*: if the adjective in question occurs in these positions then it must be derived from a kinetic verb, otherwise from a non-kinetic verb. To Borer and Wexler, kinetic verbs that do not occur in these positions (e.g. *hit*, *kick*, etc.) must be perceived as fortuitous gaps in the criterion, since contextual clues may contribute to these verbs but not to non-kinetic verbs (cf. Borer and Wexler, 1987, p.139). In contrast, Weinberg rightly points out that adjectives derived from non-kinetic verbs also seem to be perfectly acceptable with context as in (143a-b) below or without context as in (143c), meaning that adjectival-passive formation cannot be restricted to kinetic verbs only (cf. Weinberg, 1987, p.178).

(143) a. After seeing so many orphans, a ***loved*** child is a pleasure to see.
b. The child seems ***loved***, but then she shows up with all those bruises.
c. A ***respected*** woman; an ***admired*** man; an ***appreciated*** complement; a ***despised*** dictator; a ***loathed*** criminal; an ***expected*** retort; etc.

What is more, in pointing to the fact that the canonical passive form of the verb is morphologically distinct from the adjectival passive form in Semitic languages such as Hebrew (see note 33), Borer and Wexler do not seem to have realized the fact that this morphological distinction eliminates all sorts of ambiguity between the two forms, regardless of any other variables (kinetic, non-kinetic, contextual, etc.). In English, on the other hand, the two forms just happen to exhibit the same morphological complexity, and thus syntactic ambiguity would be expected, unless other variables play a role, since inflectional features in general are invisible at the PF level in this language. Given that inflectional features are visible at the PF level in Hebrew (or even more visible in Arabic as another Semitic language), the production of any instance of the canonical passive construction (be it short or long) is never potentially ambiguous between a verbal reading and an adjectival reading. As a consequence, even if restricting adjectival-passive formation to kinetic verbs were true, it would not explain the priority of canonical passives with kinetic verbs over canonical passives with non-kinetic verbs in L1 acquisition. Referring back to the extrinsic ordering stated in (138), it is simply because the latter are far less frequent in the evidence (the linguistic input) than the former.

One final point to be made here is that, in relation to the hierarchy of stem derivation in Arabic in particular, the adjectival passive form (the nomen patientis) is in fact derived directly from the canonical passive form, but not from the canonical active form of the verb, meaning that adjectival-passive formation is conditioned by the passivizability of the active verb. For instance, the adjectival passive *maksu:r* 'broken' is derived directly from the passive verb *kusira* 'to be broken' rather than from the active version *kasara* 'to break' to mark Agr-features of Number and Gender only.[35] The fact that it is possible to derive the adjectival passive form from reflexive verbs such as *inkasara* 'to break (Ref)' as in *munkasir* 'broken (Ref)' can be ascribed to the resultative meaning that is already implied in the former. Given that the resultative meaning is also typical of the canonical passive form, it is impossible to derive this form from reflexive verbs as in **unkusira* 'to be broken (Pass, Ref)' (cf. El-Marzouk, 1998b, pp.23f., 29f.). Accordingly, with reference to the intrinsic ordering stated in (137), the canonical passive form creates a derivational basis for the adjectival passive form, and therefore the latter applies only if the former has already applied. If this intrinsic ordering is true in all languages instantiating the canonical passive construction, then one should not be surprised to realize that Borer and Wexler do not really treat the development of this construction as a process of progression from a tadpole to a frog (as they claim within their maturational account), but rather as a process of regression from a frog to a tadpole!

Having considered the fundamental characteristics of the continuity hypothesis and those of the maturation hypothesis, it seems that the two hypotheses only differ in their *a priori* or *ad hoc* statements about the status of UG principles in L1 acquisition, even though both are enunciated within an innatist framework. While the continuity hypothesis subscribes to the continuous existence of these principles at all stages of L1 development, the maturation hypothesis underlines their gradual maturation from one stage of L1 development to another. This difference in the status of UG principles has led indeed to different interpretations of the natural ordering of the linguistic input. According to the continuity hypothesis, to place no specific restrictions on the linguistic input would simply mean to maintain the continuity of learning at all stages of L1 development. According to the maturation hypothesis, on the other hand, the linguistic input is highly restricted from the beginning of the child's exposure: it is the gradual maturation of UG principles that would determine the natural ordering of the linguistic output. This difference in interpreting the linguistic input has in turn resulted in different, and therefore contradictory, accounts of certain empirical observations about the learnabiltity problem of the canonical passive construction in the L1.

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[35] Although adjectives in Arabic (or Hebrew) generally mark Agr-features of Number and Gender only (see note 33), the distinction between the adjectival passive and the canonical adjective is explicable in terms of other variables, even if both exhibit the same morphological complexity. The adjectival passive is derived from a verb that is passivizable or a verb denoting resultativeness as will be shown in the text, for which reason the adjectival passive implies an aspectual element associated with the completion of the activity assigned by the underlying lexical form as in *maksu:r* 'broken', *maktu:b* 'written', etc. Whereas the canonical adjective generally indicates an attributed quality (sate or condition) which is not associated with the completion of an activity as in *majnu:n* 'crazed', *mutak̲allif* 'retarded', etc.

However, apart from the confusing and misleading nature of the empirical research, neither hypothesis seems to deny the existence of the intrinsic and extrinsic orderings stated in (137) and (138) above. As for the continuity hypothesis, it plainly necessitates the two kinds of linguistic-input ordering, though the two constructions which stand for the two variables X and Y in the extrinsic ordering specifically may differ from one observation to another. Even if we assume that the maturation hypothesis is on the right track, it also requires the two kinds of ordering but in 'maturational' terms. On the one hand, the priority given to the adjectival passive over the canonical passive would suggest that the former creates a derivational basis for the latter (intrinsic ordering). On the other, the priority given to dynamic passives with kinetic verbs over dynamic passives with non-kinetic verbs (and, therefore, to short passives over long passives) would imply that the former are unmarked with respect to the latter (extrinsic ordering). In the next and final section, both kinds of linguistic-input ordering will be taken as the logical basis for teachability in respect of the canonical passive construction in the L2, a basis which will be treated with reference to the intrinsic and extrinsic dimensions of this construction put forward in the preceding section (section 2.2).

2.4 L2-passive teachability

As it is difficult to give a clear-cut picture about the learnability problem of the canonical passive construction in the L1, it is equally difficult to ascertain the linguistic and non-linguistic cues for the learning of this construction in the L2, given the L2 learner's past experience which includes SKn1 and SKn2. Thus, if it is true that the adjectival passive precedes the canonical passive in L1 development, where the former construction is explained in terms of lexical rules and the latter construction in terms of syntactic rules, one way of interpreting this order of acquisition is to claim that functional categories are missing in the child's early grammar (see, for example, Gleitman, 1982; Radford, 1990). Accordingly, the child seems to process lexical categories (Ns, Vs, As, etc.) but not functional categories (Agr, Tns, Pass, etc.) at a certain stage of L1 development (for a different opinion, see Wexler, 1994). Another way of interpreting is to propose a Principle of Economy which may decide between whether functional categories are generated in the lexicon or the syntax of the language (see, for example, Speas, 1994).

But the L2 learner under discussion (a learner who attains a fairly acceptable quantum of L2 syntax) does not seem to 'adopt' this lexical-syntactic specification of the canonical passive construction, if it is indeed the right order in the normal situation of L1 development. Although L1 acquirers normally progress from an initial or unsteady state of knowledge to a final or steady state of knowledge for the attainment of SKn1, a language continuum that is complete with UG principles and the correct values of the parameters involved, the vast majority of L2 learners do not really manage to achieve an SKn2 that is equivalent to SKn1, since what is referred to as 'balanced bilingualism' or 'perfect bilingualism' is extremely rare, if it exists all. Thus, the predominance of 'unbalanced bilingualism' or 'imperfect bilingulism' in the normal situation of L2 development is ascribable to the prior existence of SKn1 itself, whereby the L2 learner already possesses one **total** instantiation of UG in the L1 (cf. Cook and Newson, 1996, pp.125f.). This suggests that if the L2 learner possesses a further instantiation of UG in his/her SKn2, such an instantiation would be characterized by a **partial** nature (i.e. the relevant set of principles and parameters are not instantaneously available for utilization at any point in time).

Among the numerous issues that have emanated from the application of the P&P model to L2 learning/teaching, the question of whether or not UG is accessible to the L2 learner seems to occupy a central position. Researchers like Cook (1985), for instance, attempt to explain this question as a choice between three possibilities. Firstly, the L2 learner has 'direct access' to UG, where his/her SKn2 is not influenced by his/her SKn1. If this is indeed the case, then the L2 learner is said to refix the specific value of a given parameter (say, the [V+Pass] parameter) directly from the L2 evidence. Secondly, the L2 learner has 'indirect access' to UG through the medium of his/her SKn1, a situation in which instances of positive and negative transfer from the L1 would be expected. Thirdly, the L2 learner has 'no access' to UG, where the target L2 is not treated as a natural language at all. In this case, the target L2 may not be learnt via direct or indirect access to UG, but rather via mental faculties other than the language faculty (see, also, Cook and Newson, 1996, pp.292f.).

It follows from the above that versions of the three possibilities of UG accessibility have rather 'subliminally' been advocated in L2 teaching methodology in one form or another, even though some approaches to this methodology would not admit of concepts like UG. Thus, while instances of the audiolingual approach (e.g. the direct method) and the communicative approach (e.g. the natural method) assume direct access to UG, instances of the structuralist approach (e.g. the grammar-translation method) imply indirect access to UG. Furthermore, other techniques such as those based on grammatical explanation or drills suggest no access to UG. However, since no L2 teaching method on its own can prove to be the most effective method, an 'eclectic' approach to L2 pedagogy has always been desirable in this connection (see, for example, Kharma and Hajjaj, 1989). This indicates that the three possibilities of UG accessibility are nothing more than integrated sub-variants of a 'tripartite' metaphor that may vary from one L2 learning context to another, or even from one L2 construction to another (cf. Cook, 1994).

Concerning the canonical passive construction in Arabic and English, all three sub-variants of this metaphor seem to apply in one form or another. Thus, the refixing of the verbal value of the [V+Pass] parameter by the English-speaking learner of Arabic or the nominal value of the same parameter by the Arabic-speaking learner of English may assume direct access to UG. Whereas any of the principles which underlie the formation of the construction in question (e.g. DC-movement to subject position in the dynamic passive or SC-retention in its base position in the static passive) may imply indirect access to UG for either L2 learner. Moreover, historical accidents such as the irregularities of the system of passive morphology (or any other morphological system, for that matter) may suggest no access to UG for either L2 learner as well, since UG is concerned with core grammar rather than with the periphery (cf. Cook and Newson, 1996, p.118). This is a clear indication that the teachability of the canonical passive construction (or any other construction) in the L2 cannot be restricted to only one of the teaching methods referred to above. Nor can this construction be learned effectively in the L2 without previous knowledge of the active version as part of SKn2.

As mentioned earlier, the task of the approach to frequency asymmetry seems to be indispensable for giving priority to certain instantiations of the canonical passive construction over others within a logical order of L2 teachablility (cf. section 2.2). Despite the misleading and contradictory nature of the empirical research into the learnability problem of this construction in the L1, the discussion in the preceding section (section 2.3) in fact brought to light the two kinds of linguistic-input ordering, intrinsic ordering and extrinsic ordering (cf. items (137) and (138)). Since the intrinsic and extrinsic dimensions of the canonical passive construction refer to its derivational and functional aspects respectively (see also note 30), these two kinds of linguistic-input ordering will be implemented accordingly for the logical order of teachablility in respect of the construction under discussion. Given that the approach to frequency asymmetry presupposes a comparative analysis of the canonical passive construction in Arabic and English, the concern of part 1, this order of teachability will address both the Arabic-speaking learner of English and the English-speaking learner of Arabic.

Along with the distinction between the L2 learner's SKn1 and SKn2 (where the latter, but not the former, refers to the unsteady state of his/her 'externalized' knowledge of the L2 in the sense discussed in section 2.2), the logical order of teachability in respect of the canonical passive construction in the L2 is, again, nothing to do with whether or not this order is compatible with the natural order of learnability in respect of the same construction in the L1, an order which, after all, has not yet been established in the literature, as we saw in the preceding section. All we can say in this respect is that, given the L2 learner's SKn1 which refers to the steady state of his/her internalized knowledge of the L1, the natural order of the learnability of the construction in question has already been fixed in the L1 in one form or another. On this account, the two kinds of linguistic-input ordering (intrinsic and extrinsic) seem to be the only available criteria for discussing the logical order of teachability in respect of the canonical passive construction in the L2, regardless of the approach the language teacher may adopt to L2 teaching (structuralist, communicative, or a mixture of both). To maintain the logical succession of this teachability order, the intrinsic and extrinsic dimensions of the construction under discussion will be considered in turn.

(i) The intrinsic dimension

The intrinsic dimension of a particular construction X must be understood here as the derivational history of X in the sense explained in part 1, an history which spans all the possible structural conditions and mutations for the formation of X, and therefore its realization at the PF level. If this construction X creates a derivational basis for another construction Y, then the derivational history of construction X ends at a particular point *p* and the derivational history of construction Y starts at the same point *p*. Accordingly, the L2 learner would not have full control over the extemporaneous activation of construction Y without previously having full control over the extemporaneous activation of construction X, meaning that the intrinsic dimension of construction Y presupposes background linguistic and pragmatic knowledge of construction X. Now if it is correct to regard X as a passivizable active construction and Y as its canonical passive version, then it seems reasonable to suggest an intrinsic ordering in L2 teachability which is essentially based on the same intrinsic ordering proposed for L1 learnability. Thus, the logical assertion of (137) would be something like (144):

(144) **Intrinsic ordering**:
- a. Given two constructions X and Y such that X creates a derivational basis for Y.
- b. X is a passivizable active construction and Y is its canonical passive version.
- c. Given such X and Y, Y applies iff X has already applied.
- d. For any such X and Y, Y is taught iff X has already been taught.

In this case, the intrinsic ordering of linguistic input for L2 teachability ensures that the L2 learner has at least full control over the extemporaneous activation of the passivizable active construction (construction X) in his/her SKn2, otherwise the canonical passive version (construction Y) cannot be taught successfully. This is because the canonical passive construction in general cannot be fully accounted for except in conjunction with the corresponding active version, a contention that underlines the presupposed 'existence' of the latter for the formation of the former (cf. the introduction). Furthermore, the fact that the Pass element tends to be systematically attached to the underlying lexical form of the active verb, not any other lexical category, seems to also lend credence to the intrinsic ordering in (144) (cf. section 1.4, note 17). Logically, this means that the teachability of the canonical passive construction in any L2 instantiating this construction is neither individuated from nor prioritized to the teachability of the corresponding active version, as no one would imagine that there exists a successful L2 teaching context where the reverse is true.

Recall that the [V+Pass] parameter has two different values: verbalization [+V] in 1-morph canonical passives as in Arabic and nominalization [+N] in 2-morph canonical passives as in English. In spite of this parametric variation, the L2 learner, whose L1 fixes one of these two values and L2 the other, should know the fact that both L1 and L2 converge in the attachment of the Pass morpheme to V (i.e. V-movement to Pass) in the initial step of derivation. Thus, if Arabic is the L2, the L2 learner should realize that attachment in this language involves the infixation of the Pass formative morpheme within the three-radical root in the unmarked situation, depending on the morpho-phonological form of the active verb (e.g. Form I: *kasara* 'to break' vs. *kusira* 'to be broken', Form II: *kassara* 'to smash' vs. *kussira* 'to be smashed', etc.). If English is the L2, the L2 learner should realize that attachment in this language normally involves the suffixation of the Pass morpheme to the basic lexical form of the active verb (e.g. *break* vs. *broken*, *smash* vs. *smashed*, etc.). Only in the latter L2 context, however, is the L2 learner confronted with a further task of incorporating the free morpheme, the Aux *be*, as a verbalizing instrumental unit (cf. section 1.4).

Grasping the regular system of passive morphology in any language can be achieved through quasi-mathematical learning, whereas grasping the irregularities of this system (which are nothing more than historical accidents as mentioned above) can only be attained through continuous practice and by reference to extra L2 material (e.g. a good dictionary). As for the regularities, it is not hard for the L2 learner to recognize the systematic nature of passive morphology. While in Arabic this nature is reflected in the changing of vowel distribution within the formative morpheme (e.g. Form I: *XaYaZa* (**Active**) vs. *XuYiZa* (**Passive**), Form II: *XaYYaZa* (**Active**) vs. *XuYYiZa* (**Passive**), Form III: *Xa:YaZa* (**Active**) vs. *Xu:YiZa* (**Passive**), etc.), in English it is simply reflected in the suffixation of *-ed* or just *-d* to the basic form of the regular (or weak) verb where either suffix is determined by the nature of the final consonant or phoneme (e.g. *ask* vs. *was asked*, *permit* vs. *was permitted*, *smash* vs. *was smashed*, *bake* vs. *was baked*, *invite* vs. *was invited*, etc.). In either language, the purpose is to incorporate the regular Pass morpheme into the underlying lexical form of the verb.

As for the irregularities of passive morphology, on the other hand, the L2 learner is, in this case, encountered with a greater effort to incorporate the relevant Pass morpheme into the underlying lexical form of the verb. This is due to the obvious fact that it is not easy (even for the linguistic analyst) to capture such irregularities in a uniform fashion. Thus, in Arabic, which incorporates the three-radical root system, irregularities emerge from what is known as 'geminated verbs' where the second and third radicals are identical (e.g. *jarra* 'to pull' vs. *jurra* 'to be pulled', etc.), or from what is termed 'hollow verbs' where the second radical is phonetically realized as a long vowel (e.g. *za:ra* 'to visit' vs. *zi:ra* 'to be visited', etc.), or from the so-called 'weak verbs' where the third radical is phonetically realized as a long vowel (e.g. *rama*: 'to throw' vs. *rumiya* 'to be thrown', etc.). Whereas in English irregularities simply arise from irregular (or strong) verbs in which the Pass morpheme is represented by a variety of suffixes with or without change in vocalic and/or consonantal distribution (e.g. *beat* vs. *was beaten*, *bring* vs. *was brought*, *teach* vs. *was taught*, etc.), or by zero-suffixes with or without change in vocalic distribution (e.g. *dig* vs. *was dug*, *hit* vs. *was hit*, *read* vs. *was read*, etc.).

Given the L2 learner's SKn1 where the acquisition of the canonical passive construction in the L1 has already been attained, his/her past experience (which includes his/her SKn1) should be exploited fruitfully for the acquisition of the derivational aspects of this construction in the L2. This is due to the inevitable existence of typological convergence between L1 and L2 in these aspects, as we have seen throughout. Since it is assumed that the L2 learner's past experience also includes his/her SKn2, where the acquisition of at least the active construction in the L2 has already been attained, the teaching of the passive morphology of the lexical verb should not be separated from the teaching of the canonical passive construction as a whole. This is because the logical relationship between the argument structure of the active verb and that of the passive version is still held, though the external argument in the latter may or may not be structurally represented. Hence, whether the canonical passive version leads to the derivation of the dynamic type or the static type, the intrinsic dimension of either type is to do mainly with the lexical category which occupies the subject position, the lexical verb which assigns an external theta-role, and the residue of the sentence as illustrated in (145) and (146):

(145) **The dynamic passive:**
  a. Move the dynamic category (DC) to subject position.
  b. Check the Nominative-Case assignment of DC.
  c. Attach passive morphology to the lexical verb (V).
  d. Check the inflectional features of V.
  e. Insert/delete V-complement where necessary.
  f. Check the appropriate Case assignment of V-complement.
  g. Insert/delete the agentive PP where necessary.
  h. Check the Oblique-Case assignment of the object of P.

(146) **The static passive:**
  a. Insert the nominal expletive (Exp) in subject position.
  b. Check the Nominative-Case assignment of Exp.
  c. Attach passive morphology to the lexical verb (V).
  d. Check the inflectional features of V.
  e. Retain the static category (SC) in its base position.
  f. Check the appropriate Case assignment of SC.
  g. Insert/delete V-complement where necessary.
  h. Check the appropriate Case assignment of V-complement.

i. Insert/delete the agentive PP where necessary.
j. Check the Oblique-Case assignment of the object of P.

Clearly, therefore, the intrinsic dimension of the canonical passive construction as a unified syntactic phenomenon exhibits the typological convergence between L1 and L2 in this construction as shown in (145) and (146). Accordingly, the L2 learner's perception of this convergence should be underlined from the very outset in order to enable him/her to make the relevant cross-linguistic tie-ups (cf. Ringbom, 1987; 1990). Since the typological divergence, on the other hand, is to do mainly with the inflectional features of the lexical categories involved, the English-speaking learner of Arabic seems to be confronted with a greater effort to grasp such features compared with the Arabic-speaking learner of English. This is ascribable to the morphological realization of the feature-checking process at the PF level in Arabic, but not English. Hence, the feature-checking process applies to all the lexical categories involved as shown in (145) and (146), including the object of P in the agentive PP where it is necessarily inserted as in (145g–h) and (146i–j). Yet, the distinction between short and long passives, among other distinctions, should be accounted for in terms of the extrinsic dimension of the construction in question, as will be seen soon.

(ii) The extrinsic dimension

As integral to the intrinsic dimension discussed above, the extrinsic dimension of a particular construction X refers to its functional utilization taken from the viewpoint of its frequency in a particular language or any other language instantiating X. As such, the extrinsic dimension refers to how construction X functions both intra-linguistically and cross-linguistically in the sense discussed in sections 2.1 and 2.2 (see also note 24). Frequency should, therefore, be correlated with unmarkedness: the more frequent construction X is the more unmarked X will be, the less the less. If this construction X is unmarked with respect to another construction Y, then the linguistic input for L2 teachability should be designed in accordance with this route (i.e. first X, second Y). This is explicable in terms of the obvious fact that the norm in any natural language is far more predominant than the exception (where X is the norm and Y is the exception). Given the integral nature of the extrinsic dimension, it presupposes on the part of the L2 learner full control over the extemporaneous activation of the intrinsic dimension in his/her SKn2. However, unlike the intrinsic dimension in which the two variables X and Y stand for two different constructions establishing a derivational relation, the two variables X and Y in the extrinsic dimension must be understood as possible representatives of two different types of the same construction, meaning that type X is unmarked with respect to type Y. Again, if it is correct at this point to regard X as the dynamic passive type (145) and Y as the static passive type (146), then it seems plausible to suggest an extrinsic ordering in L2 teachability which is based on essentially the same extrinsic ordering proposed for L1 learnablility, but with different variables. Thus, the logical assertion of (138) would be something like (147):

(147) **Extrinsic ordering:**
  a. Unmarkedness is prioritized to markedness.
  b. Construction X is unmarked with respect to construction Y.
  c. X is the dynamic passive type and Y is the static passive type.
  d. Therefore the teaching of X is prioritized to the teaching of Y.

In this case, the extrinsic ordering of linguistic input for L2 teachability ensures that the L2 learner has at this stage full control over the extemporaneous activation of the intrinsic dimension of the canonical passive construction in his/her SKn2 as discussed above, otherwise the distinction between the dynamic and static passive types (X and Y in (147)) cannot be taught successfully. The priority of the dynamic passive (type X) over the static passive (type Y) in L2 teachability can, again, be explained in terms of the obvious fact that the former type is much more common than the latter type in any language instantiating the canonical passive construction, as we saw earlier in part 1. Given the frequency-based approach to either type in Arabic and English (cf. section 2.1), the extrinsic ordering in (147) will be considered in the light of the frequency paradigms and sub-paradigms highlighted in section 2.2. This will be followed by a consideration of the distinction between short and long passives as two further possible representatives of the two variables X and Y respectively.

Traditionally, in the hey-day of the structuralist approach to language learning/teaching, the pedagogical implication of contrastive analysis rested on the priority of the formal differences between the L2 learner's L1 and the target L2 he/she is learning, since these differences were believed to be the main source of learning difficulty. This approach, however, had its practical flaws as the degree of cross-linguistic difference does not necessarily correlate with the magnitude of learning difficulty, provided that instances of cross-linguistic similarity, especially those which only exist in the L2 learner's SKn2, do not always guarantee learning facilitation. As it is true that there exists cross-linguistic similarity between any L1 and L2, it is equally true that the greater the potential for such similarity the larger the scope of facilitation there will be in L2 learnability. This means that, in L2 teachability, priority must be given to the L1 instances that are to varying degrees similar to their L2 counterparts, particularly those L1 instances which are *known* already to the L2 learner in his/her SKn1, but that he/she does not perceive as cross-linguistically similar to the L2 counterparts. Hence, widening the L2 learner's perception of these instances is necessary for him/her to automatize the relevant cross-lingual tie-ups, since the ability to associate what comes to SKn2 with what already exists in SKn1 is a natural tendency (cf. Kellerman, 1983; Ringbom, 1987; 1990).[36]

It follows from the above that, because the approach to frequency asymmetry deals with the functional convergence and divergence between Arabic and English in the canonical passive construction from all possible angles, the extrinsic ordering of linguistic input for L2 teachability should be designed in accordance with essentially the same order of frequency paradigms and sub-paradigms highlighted earlier in this part (cf. section 2.1). On this basis, the unmarkedness of the dynamic passive type (type X) with respect to the static passive type (type Y) should be taken into account, whilst at the same time giving priority to functional convergence over functional divergence. With the notion of unmarkedness in mind, priority should also be given to the normal situation within the order (X is the norm and Y is the exception) for each of the frequency sub-paradigms, where there exists a marginally exceptional situation, or situations, as discussed earlier in this part (cf. section 2.2). Therefore, in designing the extrinsic ordering of linguistic input for L2 teachability, the following prerequisites should be met:

(148) a. The dynamic passive type precedes the static passive type.
b. The normal situation in either type precedes the exceptional situation.
c. Functional convergence in either type precedes functional divergence.

Furthermore, so far as the functional convergence is concerned, the discussion in section 2.1 illustrated the fact that not every instance of either type of the canonical passive construction in Arabic functions as a corresponding instance of the same type in English (or vice versa). For this reason, the canonical passives that do in fact mark functional convergence between the two languages have been considered under the two rubrics:

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[36] In this connection, we have demonstrated that cross-linguistic similarity between genetically unrelated languages such as Arabic and English exists even in the phonological domain, especially with respect to the written variety of the former language (Classical Arabic or Modern Standard Arabic (MSA)). Such similarity concerns a taxonomy of certain types of consonant clusters in terms of certain variables as well as the conditions under which the relevant cross-lingual tie-ups would facilitate the process of L2 learning (cf. El-Marzouk, 1993 for a detailed analysis).

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functional homogeneity and functional heterogeneity, with the former addressing the actual correspondence in instances of either type (ADP *vs.* EDP and ASP *vs.* ESP) and the latter referring to the absence of such correspondence (ADP *vs.* ESP and ASP *vs.* EDP) (see also section 2.2, items (125) and (126)). Given this existing fact as well as the priority of cross-linguistic similarity between L1 and L2 in the linguistic input for L2 teachability, the extrinsic ordering illustrated in (148) above should be extended as in (149) below:

(149) a. The dynamic passive type precedes the static passive type.
   b. The normal situation in either type precedes the exceptional situation.
   c. Functional convergence in either type precedes functional divergence.
   d. Functional homogeneity in either type precedes functional heterogeneity.

It now becomes evident that, with reference to the universal distinction between the dynamic passive type and the static passive type illustrated in (145) and (146) above, the extrinsic ordering of linguistic input for both the English-speaking learner of Arabic and the Arabic-speaking learner of English should initially be designed in accordance with paradigm C. This is because paradigm C, as we saw earlier, deals with the canonical passives that do in fact mark functional convergence between Arabic and English, with sub-paradigms C1 and C2 concerning functional homogeneity and sub-paradigms C3 and C4 relating to functional heterogeneity. In addition, since paradigms D and E address the functional divergence between the two languages from the viewpoint of Arabic and English respectively, the extrinsic ordering of linguistic input for either L2 learner should continue in accordance with the relevant frequency paradigm, taking into account the priority of sub-paradigm D1 over D2 for the English-speaking learner of Arabic and the sole occurrence of sub-paradigm E1 for the Arabic-speaking learner of English. Thus, the extrinsic ordering of linguistic input for either L2 learner is shown in (150) and (151) below:

(150) **The English-speaking learner of Arabic:**
   a. The dynamic passives in Arabic that function as corresponding dynamic passives in English (sub-paradigm C1).
   b. The static passives in Arabic that function as corresponding static passives in English (sub-paradigm C2).
   c. The dynamic passives in Arabic that function as corresponding static passives in English (sub-paradigm C3).
   d. The static passives in Arabic that function as corresponding dynamic passives in English (sub-paradigm C4).
   e. The dynamic passives in Arabic that do not function as corresponding

canonical passives of either type in English (sub-paradigm D1).

f. The static passives in Arabic that do not function as corresponding canonical passives of either type in English (sub-paradigm D2).

(151) **The Arabic-speaking learner of English:**

a. The dynamic passives in English that function as corresponding dynamic passives in Arabic (sub-paradigm C1).

b. The static passives in English that function as corresponding static passives in Arabic (sub-paradigm C2).

c. The dynamic passives in English that function as corresponding static passives in Arabic (sub-paradigm C4).

d. The static passives in English that function as corresponding dynamic passives in Arabic (sub-paradigm C3).

e. The dynamic passives in English that do not function as corresponding canonical passives of either type in Arabic (sub-paradigm E1).

One final point to be considered here concerns the distinction between short and long passives in either language. Recall that, in languages instantiating the canonical passive construction, the vast majority of the natural instances of this construction are agentless, instances of the so-called 'short passive' (approximately 95% in Arabic *vs.* approximately 85% in English) (cf. section 2.1, note 27). This indicates that the agentive PP is necessarily deleted in the unmarked situation, whereas it is necessarily inserted in the marked situation (see also section 1.2). Because the extrinsic ordering of linguistic input for L2 teachability gives priority to unmarkedness over markedness, one might believe that the short passive and the long passive would also act as two further possible representatives of the two variables X and Y respectively.[37] Accordingly, the logical assertion of (147) above would be something like (152) below:

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[37] Notice that the distinction between dynamic passives with kinetic verbs and dynamic passives with non-kinetic verbs does not seem to play a significant role in the extrinsic ordering of linguistic input for L2 teachability. This is because, unlike the case with L1 learnability where the two kinds of dynamic passives may act as two possible representatives of the two variables X and Y respectively (cf. section 2.3), this extrinsic ordering is essentially determined by the priority of the dynamic passives in the target L2 which function as corresponding dynamic passives in the L2 learner's L1 (sub-paradigm C1), regardless of the kind of lexical verb incorporated. After all, the possible priority of dynamic passives with kinetic verbs in child language may, in addition to the limited frequency of dynamic passives with non-kinetic verbs in the linguistic input, be reduced to the developing nature of cognitive processes such as conceptualisation, a process that is assumed to be fully developed in our L2 learner (see also notes 22 and 28).

(152) **Extrinsic ordering:**

a. Unmarkedness is prioritized to markedness.
b. Construction X is unmarked with respect to construction Y.
c. X is the short passive and Y is the long passive.
d. Therefore the teaching of X is prioritized to the teaching of Y.

Although the extrinsic ordering in (152), like the extrinsic ordering in (147), ensures that the L2 learner already has full control over the intrinsic dimension of the canonical passive construction in his/her SKn2 (cf. (145–146)), the distinction between short and long passives would appear to be far less problematic in L2 teachability than the distinction between dynamic and static passives. This is explicable in terms of the fact that the necessary deletion or insertion of the agentive PP does not in general affect the internal structure of the canonical passive construction as a whole, whereas the dynamicness or staticness of this construction is primarily conditioned by the syntactic behaviour of the categories c-selected by the lexical verb. Hence, in giving priority to the dynamic passive type over the static passive type in the extrinsic ordering in (147), the necessary deletion or insertion of the agentive PP is already accounted for in the intrinsic dimension in (145g–h) and (146i–j), meaning that the logical order of either type in L2 teachability entails the unmarkedness of short passives with respect to long passives.

From the above discussion of the teachability problem of the canonical passive construction in the L2, it can be seen that the logical order of linguistic input addresses both the English-speaking learner of Arabic and the Arabic-speaking learner of English. In considering the intrinsic and extrinsic dimensions of this construction, special emphasis was placed on the cross-linguistic similarities that exist between Arabic and English in either dimension (that is, typological convergence in the intrinsic dimension and functional convergence in the extrinsic dimension). Given the universal distinction between the dynamic passive type and the static passive type, the cross-linguistic similarities in either type were underlined to underline the facilitative role of the L2 learner's L1 from the very outset of teaching the construction in question. Thus, in either L2 teaching context, where Arabic or English is the target L2, the L2 learner is induced to make the necessary cross-lingual ties-ups as necessary preconditions for the absence of further tie-ups.

It is, therefore, the responsibility of the language teacher to capitalize on the facilitative role of the L1 in either L2 teaching context through focusing on the L2 Learner's real perception of the cross-linguistic similarities between L1 and L2. Apart from the approach adopted to either L2 teaching context (structuralist, communicative, etc.), this responsibility requires of the language teacher that he/she attain complete mastery of at least the two languages involved, the L2 learner's L1 and the target L2. In addition, the language teacher should have available a set of paradigms that are similar in spirit to those worked out within the approach to frequency asymmetry, paradigms in terms of which he/she is able to elucidate how a given instance of either type of the canonical passive construction in the L1 is realized in the L2, or vice versa. In such a perspective, the language teacher would be in a far better position to emphasize the priority of the cross-linguistic similarities between L1 and L2 in the linguistic input for L2 teachability, including those similarities which are not available in the L2 Learner's perception. Thus, the L2 Learner's SKn1 experience can be automatized from the beginning as an aiding reference frame, since cross-linguistic relationships are always being modified during his/her SKn2 experience.

3 Conclusion

Part 1 of this study concentrated on a set of general principles (proposed within the framework of Universal Grammar (UG)) and the manner in which they interact for canonical-passive formation in Arabic and English as two samples of genetically unrelated languages. Reference was also made to some other languages where necessary for typological analysis in this connection. Given the assumption that these general principles reflect certain properties of the human mind, they are perceived to yield the mental representation of the construction under consideration as one instantiation of UG, thereby delineating its universal properties. This means that the general principles being talked about are taken as responsible for the typological convergence between even genetically unrelated languages, whereas typological divergence is reducible to different values of the same parameters involved.

Section 1.1 offered a sketchy historical account of the paradigmatic shifts in the derivational system of UG from the 1950s to the present decade insofar as they are relevant to the canonical passive construction in Arabic and English. Generally, these paradigmatic shifts can be observed in three distinctive phases: first, in the TGG model up to the 1970s, the sets of units inserted in the phrase marker were looked upon as strings of not necessarily ordered morphemes; second, in the early version of the P&P model in the 1980s, the sets of selected units were viewed as sets of uninflected lexical items; and third, in the later version of the P&P model in the 1990s, the selected units were now taken as fully inflected lexical items. These three phases were the subject-matters of sections 1.2, 1.3, and 1.4 respectively. Section 1.2 considered the canonical passive construction according to the TGG model up to the 1970s, where the construction was assumed to result from the application of a transformational rule known as Pass-transformation. The section also underlined the main criticisms forwarded against this rule such as its presupposed optionality of the agentive PP and its failure to incorporate to so-called 'impersonal passive'. Section 1.3 discussed the canonical passive construction according to the early version of the P&P model in the 1980s, where the Pass element was identified with 'theta-role absorption' and 'Case absorption' (an identification which imposes an argument status on the Pass element). The section also highlighted the conceptual defects of this analysis and showed that the Pass element absorbs neither Case nor theta-role assignment, simply because its status as an argument is not compatible with its status as base-generated under I (the head of IP). Section 1.4, the final section, introduced an alternative analysis of the construction in question with some reference to the later version of the P&P model in the 1990s. Here, the Pass element is treated as a functional category in its own right, a treatment that is crucial for scrutinizing virtually unnoticed aspects of the canonical passive construction and reconsidering all the misleading terms that have been used to describe several types of this construction. Finally, the section was concluded with the new syntactic definition of the construction, a definition which now indicates that, both intra-linguistically and cross-linguistically, there exist only two types, viz. the 'dynamic passive' and the 'static passive'.

Part 2 drew on the potential frequency differences between Arabic and English in the canonical passive construction. Given the universal distinction between the dynamic and static passive types, the frequency differences were thus examined within a particular approach to functional convergence and divergence from all possible angles. Essentially, this was to arrive at generalizable statements about the manner in which either type in Arabic functions in English and vice versa. The discussion in this part also touched on the essential practical implications of such an approach from the viewpoint of linguistic-input ordering which, in turn, was considered with reference to the intrinsic (derivational) and extrinsic (functional) dimensions of either type. The objective was to examine some of the insights into the natural order of the canonical passive in L1 learnability, and to suggest a logical order of this construction in L2 teachablility, with the latter addressing both the Arabic-speaking learner of English and the English-speaking learner of Arabic.

Section 2.1 defined the two sorts of knowledge internalized by the native speaker in respect of the canonical passive (viz. linguistic and pragmatic) and showed how this knowledge has bearing on the functional dimension of this construction. Following this, the particular approach to frequency asymmetry was identified by using five paradigms (A, B, C, D, and E), with the last three addressing functional convergence between Arabic and English, functional divergence from the perspective of Arabic, and functional divergence from the perspective of English, respectively. Section 2.2 reintroduced the two sorts of internalized knowledge to underline its symmetrical balance between the native speaker of Arabic and the native speaker of English. Hence, the operation of this balance was considered in the light of the frequency paradigms and sub-paradigms discussed in section 2.1 in order to identify their practical implications with L1 learnability L2 teachability in respect of the canonical passive. Section 2.3 considered some of the empirical research into the natural order of L1 acquisition in general, so as to discuss two innatist, but conflicting, hypotheses (continuity and maturation) and their contradictory accounts of the learnability problem of the canonical passive in the L1. The section also showed that, despite these contradictory accounts, neither hypothesis seemed to deny the two kinds of linguistic-input ordering (intrinsic and extrinsic) within the attempt to examine the natural order of this construction, given its intrinsic and extrinsic dimensions. While the continuity hypothesis plainly requires these two kinds of linguistic-input ordering but with empirically different variables, the maturation hypothesis appears to confine them to the gradual maturation of UG principles. In section 2.4, the final section, some introductory remarks on L2 acquisition research were made as a preliminary to the teachability problem of the canonical passive in the L2. Given the learner's SKn1 and SKn2, priority was given to certain instantiations of this construction over others within a logical order of L2 teachability, which addressed both the English-speaking learner of Arabic and the Arabic-speaking learner of English. Thus, whatever the approach to L2 teaching, cross-linguistic similarities between L1 and L2 in the same construction were underlined with reference to its two dimensions (intrinsic and extrinsic). As for the intrinsic dimension, special emphasis was placed on the typological convergence in both types (dynamic and static). As for the extrinsic dimension, the priority of the functional convergence in either type was also underlined in terms the frequency paradigms and sub-paradigms. Finally, the section was concluded with some remarks on the responsibility of the language teacher for utilizing the learner's SKn1 as a facilitative reference frame in L2 learning.

References

Main sources

Abney, S. P., 1987: *The English Noun Phrase in Its Sentential Aspect*. PhD Thesis. MIT.

Akmajian, A. and Heny, F., 1975: *An Introduction to the Principles of Transformational Grammar*. Cambridge, Mass.: MIT Press.

Al-Bustani, B., 1983: *Muhit-Ul-Muhit: An Arabic-Arabic dictionary*. Beirut: Librairie du Liban.

Al-Ghalaayiini, M., 1982: *jaami' al-duruus al-'arabiyya*. [*A Compendium of Arabic Grammar*]. Beirut: Modern Printing Press.

Anderson, H., 1973: Abductive and deductive change. *Language*, 49:765-793.

Baker, M., 1988: *Incorporation: A Theory of Grammatical Function Changing*. Chicago: Chicago University Press.

Baker, M., Johnson, K. and Roberts, I., 1989: Passive argument raised. *Linguistic Inquiry*, 20, 2:219-251.

Berwick, R.C., 1991: Principle-based parsing. In P. Sells, S. M. Shieber and T. Wasow (eds.): *Foundational Issues in Natural Language Processing*. Cambridge, Mass.: MIT Press, 115-226.

Bohas, G., Guillaume, J. and Ouloughli, D., 1990: *The Arabic Linguistic Tradition*. London: Routledge.

Bolinger, D., 1977: Transitivity and spatiality: The passive of prepositional verbs. In A. Makki, V. Becker Makkai and L. Hailmann (eds.): *Linguistics at the Crossroads*. Lake Bluff, Ill.: Jupiter Press, 57-78.

Borer, H., 1986: I-subjects. *Linguistic Inquiry*, 17, 3.

Borer, H. and Wexler, K., 1987: The maturation of syntax. In T. Roeper and E. Williams (eds.), 123-173.

Bulos, A., 1965: *The Arabic Triliteral Verb*. Beirut: Khayats.

Chomsky, N., 1955: *The Logical Structure of Linguistic Theory*. Published in 1975. New York: plenum.

Chomsky, N., 1957: *Syntactic Structures*. The Hague: Mouton & Co.

Chomsky, N., 1965: *Aspects of the Theory of Syntax*. Cambridge, Mass.: MIT Press.

Chomsky, N., 1970: Remarks on nominalisation. In R. Jacobs and P. Rosenbaum (eds.): *Readings in English Transformational Grammar*. Waltham: Ginn.

Chomsky, N., 1980: *Rules and Representations*. Oxford: Blackwell.

Chomsky, N., 1981: *Lectures on Government and Binding*. Dordrecht: Foris.

Chomsky, N., 1982: *Some Concepts and Consequences of the Theory of Government and Binding*. Cambridge, Mass.: MIT Press.

Chomsky, N., 1986a: *Knowledge of Language: Its Nature, Origin and Use*. New York: Praeger.

Chomsky, N., 1986b: *Barriers*. Cambridge, Mass.: MIT Press.

Chomsky, N., 1987: Transformational grammar: Past, present, and future. In *Studies in English Language and Literature*, Kyoto University, 33-80.

Chomsky, N., 1988a: *Language and the Problem of Knowledge: The Managua Lectures*. Cambridge, Mass.: MIT Press.

Chomsky, N., 1988b: Some notes on the economy of derivation and representation. Ms. MIT. Reprinted in Chomsky, 1995b.

Chomsky, N., 1992: A minimalist program for linguistic theory. Ms. MIT. Reprinted in Chomsky, 1995b.

Chomsky, N., 1994: Bare phrase structure. Ms. MIT. Reprinted in G. Webelhuth (ed.): *Government and Binding Theory and the Minimalist Programme*. Oxford: Blackwell, 383-440.

Chomsky, N., 1995a: Categories and transformations. Ms. MIT. Reprinted in Chomsky, 1995b.

Chomsky, N., 1995b: *The Minimalist Program*. Cambridge, Mass.: MIT Press.

Chomsky, N. and Lasnik, H., 1991: Principles and parameters theory. Ms. MIT. Reprinted in Chomsky, 1995b.

Comrie, B., 1977a: Causative verb formation and other verb-deriving morphology. Paper for circulation to co-workers of Centre for Applied Linguistics Project: *Language Typology and Syntactic Field-Work*.

Comrie, B., 1977b: In defense of spontaneous demotion: The impersonal passive. In P. Cole and J. M. Sadock (eds.): *Syntax and Semantics*, 8:47-58 New York: Academic Press.

Cook, V.J., 1985: Chomsky's Universal Grammar and second language learning. *Applied Linguistics*, 6:1-18.

Cook, V.J., 1994: UG and the metaphor of access. In N. Ellis (ed.): *Implicit Learning of Language*. London: Academic Press.

Cook, V. and Newson M., 1996: *Chomsky's Universal Grammar: An Introduction*. Oxford: Blackwell.

Dik, S. C., 1991: Functional grammar. In F. G. Droste and J. E. Joseph (eds.): *Linguistic Theory and Grammatical Description*. Amsterdam: Benjamins, 247-274.

Dixon, R. M. W., 1991: *A New Approach to English Grammar on Semantic Principles*. Oxford: Clarendon Press.

El-Marzouk, G., 1993: Some aspects of phonological transfer from Arabic to English. *Teanga: Irish Association for Applied Linguistics*, 13:29-40.

El-Marzouk, G., 1995a: Avoidance or some other strategy: A case for the passive in Arabic and English. *Teanga: Irish Association for Applied Linguistics*, 15: 113-125.

El-Marzouk, G., 1995b: Syntactic 'perfection' and lexical 'imperfection' in L1-L2 acquisition. Paper delivered at EUROSLA 5 Conference, University College Dublin, September 1995.

El-Marzouk, G., 1998a: Avoidance defined: The psychology of linguistic determinism and the ontology of cognitive predeterminism. *CLCS Occasional Paper No.52*. Republished in the USA as *ERIC Microfiche ED 421 861*.

El-Marzouk, G., 1998b: *The Canonical Passive Construction in Arabic and English*. PhD Thesis. CLCS: Trinity College Dublin.

Fassi Fehri, A., 1980: *Some Complement Phenomena in Arabic, the Complementizer Phrase Hypothesis and the Non-Accessibility Condition*. Analyse/Theorie 54-114. Université de Paris VIII, Vincennes.

Fassi Fehri, A., 1987: Generalised IP-structure, Case, and VS word order. Ms. Faculty of Letters, Rabat.

Fassi Fehri, A., 1988: Arabic passive affixes as aspectual predicates. Ms. Faculty of Letters, Rabat.

Ferguson, C. A., 1970: The role of Arabic in Ethiopia: A sociolinguistic perspective. *Language and Linguistics Monograph Series*, 23: 355-368.

Ferguson, C. A., 1972: Myths about Arabic. In J. Fishman (ed.*): Readings in the Sociology of Language*. Mouton: The Hague.

Frajzyngier, F., 1982: Indefinite agent, passive and impersonal passive: A functional study. *Lingua*, 58: 267-290.

Fraser, T., 1987: The establishment of 'by' to denote agency in English passive constructions. In A. Ramat, O. Carruba, and G. Bernini (eds.): *Papers from the 7th International Conference on Historical Linguistics*. Amsterdam: Benjamins, 239-249.

Freidin, R. (ed.), 1991: *Priciples and Parameters in Comparative Grammar*. Cambridge, Mass.: MIT Press.

Givòn, T., 1990: *Syntax: A Functional-Typological Introduction*. Vol. II. Amsterdam: Benjamins.

Gleitman, L., 1982: Maturational determinants of language growth. *Cognition*, 10:103-114.

Gruntfest, Y., 1984: Medieval Arabic Grammarians–First transformationalists? *Zeitschrift der Deutschen Margenlandischen Gesellschaft*, 134, 2: 226-236.

Haegeman, L., 1993: *Introduction to Government & Binding Theory*. Oxford: Blackwell.

Haegeman, L., 1994: *Introduction to Government & Binding Theory*. Second edition. Oxford: Blackwell.

Halliday, M. A. K., 1970: Language structure and language function. In J. Lyons (ed.): *New Horizons in Linguistics*. Harmondsworth: Penguin Books, 140-165.

Harris, R. A., 1993: *The Linguistics Wars*. Oxford: OUP.

Hasegawa, K., 1968: The passive construction in English. *Language*, 44: 230-243.

Holes, C., 1994: Arabic. In *The Encyclopaedia of Language and Linguistics*. Vol. I. Pergamon Press.

Hopper, P. J. and Thompson, S. A., 1980: Transitivity in grammar and discourse. *Language*, 56, 2:251-300.

Hyams, N. 1986: *Language Acquisition and the Theory of Parameters*. Dordrecht: Reidel.

Hyams, N. 1992: A reanalysis of null subjects in child language. In J. Weissenborn, H. Goodluck and T. Roeper (eds.): *Theoretical Issues in Language Acquisition*. Hillsdale: Erlbaum, 269-300.

Jackendoff, R. S., 1977: *X-bar Syntax: A Study of Phrase Structure*. Cambridge, Mass.: MIT Press.

Jaeggli, O. A., 1986: Passive. *Linguistic Inquiry*, 17, 4: 587-622.

Jarad, N., 1997: *The Origin & Development of For-Infinitives*. PhD Thesis. University of Wales, Bangor.

Kayne, R., 1987: Facets of Romance past participle Agreement. Ms. MIT.

Keenan, E. L., 1982: Parametric variation in universal grammar. In R. Dirven and G. Radden (eds.): *Issues in the Theory of Universal Grammar*. Tübingen: Gunter Narr Verlag, 11-74.

Kellerman, E., 1983: Now you see it, now you don't. In S. Gass and L. Selinker (eds.): *Language Transfer in Language Learning*. Rowley Mass: Newbury House.

Keyser, S. J. and Roeper, T., 1984: On the middle and ergative constructions in English. *Linguistic Inquiry*, 15, 3:381-416.

Kharma, N., 1983: *A Contrastive Analysis of the Use of Verb Forms in English and Arabic*. Heidelberg: Julius Groos Verlag.

Kharma, N. And Hajjaj, A., 1989: Use of the mother tongue in the ESL classroom. *IRAL*, 27, 3:223-235.

Klaiman, M. H., 1991: *Grammatical Voice*. Cambridge: CUP.

Lightfoot, D., 1979: *Principles of Diachronic Syntax*. Cambridge: CUP.

Leech, G. N., 1983: *Principles of Pragmatics*. London: Longman.

Levinson, S., 1083: *Pragmatics*. Cambridge: CUP.

Lyons, J., 1977: *Semantics*. Vol. I and II. Cambridge: CUP.

Maratsos, M.P., 1983: Some current issues in the study of the acquisition of grammar. In J. Flavell and E. Markman (eds.): *Child Psychology*. University of Minnesota.

Maratsos, M., Fox, D., Becher, J., and Chalkley, M., 1983: Semantic restrictions on children's early passives. Ms. University of Minnesota.

Mey, J. L., 1989: The end of the Copper Age, or: Pragmatics 12½ years after. *J Prag*, 13 (6): 825-832.

Mey, J. L., 1994: Pragmatics. In *The Encyclopaedia of Language and Linguistics*. Vol. VI. Pergamon Press.

Moreno, J. C., 1990: Impersonal constructions in Spanish. In M. Hannoy and E. Vester (eds.): *Working with Functional Grammar: Descriptive and Computational Applications*. Dordrecht: Foris, 31-49.

Ouhalla, J., 1991: *Functional Categories and Parametric Variation*. London: Routledge.

Owens, J., 1988: *The Foundations of Grammar: An Introduction to Medieval Arabic Grammatical Theory*. Amsterdam: Benjamins.

Owens, J., 1990: *Early Arabic Grammatical Theory: Heterogeneity and Standardization*. Amsterdam: Benjamins.

Perlmutter, D. M., 1978: Impersonal passives and the unaccusative hypothesis. In J. Jaeger et al. (eds.): *Proceedings of the Fourth Annual Meeting of the Berkeley Linguistics Society*. Berkeley, California, 157-189.

Perlmutter, D. M. (ed.), 1983: *Studies in Relational Grammar1*. Chicago: Chicago University Press.

Perlmutter, D. and Postal, P., 1984: The 1-advanement exclusiveness law. In D. Perlmutter and C. Rosen (eds.): *Studies in Relational Grammar* 2. Chicago: Chicago University Press, 81-126.

Pinker, S., 1984: *Language Learnability and Language Development*. Cambridge, Mass.: Harvard University Press.

Pinker, S., Lebeaux, D. And Frost, L., 1987: Productivity and constraints in the acquisition of the passive. *Cognition*, 26:195-267.

Postal, P. M., 1977: Antipassive in French. *Proceedings of the Seventh Annual Meeting of the North Eastern Linguistic Society*, 273-313.

Radford, A., 1990: *Syntactic Theory and the Acquisition of English Syntax*. Oxford: Blachwell.

Ringbom, H., 1987: *The Role of the First Language in Foreign Language Learning*. Multilingual Matters.

Ringbom, H., 1990: The role of the first language in second language comprehension and production. Lecture delivered at CLCS, Trinity College Dublin, February 1990.

Rizzi, L., 1990: *Relativised Minimality*. Cambridge, Mass.: MIT Press.

Roberts, I., 1992: *Verbs & Diachronic Syntax: A Comparative History of English & French*. Dordrecht: Foris.

Roberts, I., 1996: *Comparative Syntax*. London. Arnold.

Saad, G. N., 1982: *Transitivity, Causation and Passivization: A Semantic-Syntactic Study of the Verb in Classical Arabic*. London: Kegan paul International.

Siewierska, A., 1984: *The Passive: A Comparative Linguistic Analysis*. London: Croom Helm.

Speas, M., 1994: Null arguments in a theory of economy of projection. *North East Linguistic Society*, 24:179-208.

Stabler, E. P., Jr., 1992: *The Logical Approach to Syntax*. Cambridge, MA: MIT Press.

Taraldsen, K. T., 1991: A directionality parameter for subject-object linking. In R. Freidin (ed.), 219-268.

Tesnière, L., 1959: *Élements De Syntaxe Structurale*. Paris: Klincksieck.

Thompson, S. A., 1987: The passive in English: A discourse perspective. In R. Channon and L. Shockey (eds.): *In Honor of Ilse Lehiste*. Dordrecht: Foris, 497-511.

Tsimpli, I.-M., 1989: On properties of the passive affix in Modern Greek. *UCL Working Papers in Linguistics*.

Weinberg, A., 1987: Comments on Borer and Wexler. In T. Roeper and E. Williams (eds.), 173-187.

Weissenborn, J., Goodluck, H. and Roeper, T. (eds.): *Theoretical Issues in Language Acquisition*. Hillsdale: Erlbaum.

Wexler, K., 1994: Finiteness and head movement in early child language. In D. Lightfoot and N. Hornstein (eds.): *Verb Movement*. Cambridge: CUP, 305-350.

Williams, E., 1979: Across-the-board rule application. *Linguistic Inquiry*, 9.1.

Williams, E., 1980: Predication. *Linguistic Inquiry*, 11: 203-238.

Williams, E., 1981: Argument structure and morphology. *The Linguistic Review*, 1:81-114.

Williams, E., 1991: The argument-bound empty categories. In R. Freidin (ed.), 77-98.

Wright, W., 1967: *A Grammar of the Arabic Language*. Vol. I, Cambridge: CUP.

Ziv, Y. and Sheintuch, G., 1979: Indirect objects reconsidered. *CLS*, 15: 390-403.

Ziv, Y. and Sheintuch, G., 1981: Passives of obliques over direct objects. *Lingua*, 54, 1:1-17.

Empirical data sources

Al-Qur'aan al-Kareen. [*The Holy Koran*, the original Arabic text].
The Holy Koran. [Trans. N. J. Dawood, Penguin, 1956/1990].
The Holy Koran. [Trans. A. J. Arberry, Oxford: OUP, 1964/1990].
The Holy Qur'an. [Trans. A.Y. Ali, Islamic Propagation Centre International, 1934/1946].

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